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THE
INDIAN WORKING CLASS

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(Second Edition)



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PREFACE

The subject of industrial labour has now come to the forefront in India. There is, however, hardly any topic which is oftener discussed with such indifference to the facts of the situation or to the vital issues involved. Employment in large-scale organized industries is relatively new in this country. The industrial worker is in some measure a misfit in his new social environment while the employing class has not developed adequate conventions of fair dealing and conditions of employment. The rapid development of industries and the increase of the landless class which migrates from villages and seeks industrial employment have, indeed, hardly allowed adequate time for either a smooth adjustment of relations between labour and management or the adaptation of the social habits and attitudes of workers to the demands of the industrial system. The pace of industrialization is now greatly accelerated during war-time, sharply defining and aggravating the mal-adjustments of the working class which has been uprooted from its fields and villages, but the essential human needs of which are not adequately satisfied in the new urban-industrial environment. No sound industrial structure can be built up in the country unless these needs are met, and the hazards and rewards of the industrial system more equitably distributed among the industry, the community, and the working class. Industrial progress in India also implies her closer trade relations with other countries. Thus peace, safety and prosperity would lie in the approximation of standards of work and of living among different peoples. In fact the conditions of labour, scale of wages and standard of living of the Indian working class should not be permitted to be far disparate from those in other industrialized countries of the world, especially when India's war-time production approximates in its quality, precision and speed to that reached in those countries. Indian workmen are now producing high grade steel and 80 per cent of the articles needed by the Indian army, and registering new production records of several munition items. They are also

making locomotives, tanks, armoured vehicles and aeroplanes. China recently placed an order for £11.7 million worth of Indian textiles. India's textile production in war-time has expanded, representing about 4,800 million yards in 1944 as compared with 4,269 million yards in 1938-9. Many machines and processes have been transformed and plants have turned out excellent materials that before the War were considered incapable of being produced therefrom. The footwear industry also enormously expanded during the War. The production of 2,000 pairs a day at Cawnpore has now increased to 19,000 pairs. India produced 16.22 million pairs from all her footwear-making establishments in 1942 as compared with 7.6 million pairs in 1941. Indian shipyards are repairing all kinds of ships and building corvettes, patrol vessels and other ships. 75,000 workers have recently received technical training of high grades, of whom 63,000 have been absorbed in the various technical branches of the defence services, and 3,000 in ordnance factories. They have become machine-tool makers, munitions workers, saddlers, engineers and chemists. Many of them come from semi-skilled groups of Indian workmen. Besides, according to the Bevin training scheme, initiated in 1940 for the acceleration of munition production in India, about 450 workers have obtained higher technical training in Great Britain. On the whole, India possesses today a number of skilled operatives far exceeding what we ever had before.

Meanwhile the current of men's desire has flowed into new channels throughout the world, and the Indian working-class has been deeply influenced by the trend towards socialism. Industrial experience in other countries has shown organized unionism to be a mighty force in industry and politics. Where the working classes are forbidden freedom of association and collective bargaining and their basic human needs left largely unfulfilled, the inefficiency and disorganization of workers become serious obstacles to industrial advance, while discontent throws the industrial machinery completely out of gear through chronic disputes and strikes. Only a guarantee of economic rights and liberties of the workers in the manner of Great Britain, U.S.A., and other advanced industrial countries; and the planned services of social

welfare and security can be solvents of that labour unrest which is so wide-spread in India, and which so often flares up into 'direct action' in our industrial centres.

In war-time England, behind the social security plan of Beveridge there is a clear acceptance of the view that a definite floor must be put beneath the workers' standard of living, and that it will be the function of the State to assure a certain minimum level as a matter of right to its citizens, and to grade its benefits not in terms of charitable relief but as positive instruments towards getting more humane as well as more productive social results; but if Britain—not a socialist, far less a communist State—can adopt a Beveridge plan, there is no reason why the State in India should not adopt a similar policy. In the absence of a State plan of ameliorating labour conditions in India, another period of struggle and bitterness among the workers similar to that following the last war is bound to ensue, making it exceedingly difficult after the present war to carry through an industrial reconstruction that will secure the demands of both technological efficiency and of labour for their essential human needs and social security.

In Great Britain the last war was responsible for many forward steps in labour policy and legislation, and in the present War the Minister of Labour claims that war-time methods have been designed to introduce new, wider and more comprehensive methods of grappling with industrial problems which will be of lasting benefit to the community. In India war-time labour policy has on the contrary shown little foresight and in some respects even retrograde features. The extension of the hours of work, overstepping even the limits of the Indian Factories Act, and the intensification of labour in many branches of production in India in fact urgently demand the consideration of reasonable hours of work, minimum wages, welfare and security measures—especially in view of the abnormal rise of the cost of living in the various industrial areas. During the War the Government have permitted an increase of the daily hours of work from nine to ten or eleven hours for the textile operatives, while workers in the ordnance, engineering and other industries are doing 66 and even 70 hours per week. Experi-

ence in the last war has shown that fatigue leads to reduced efficiency and increase in absenteeism, sickness and accident rates. Thus several belligerent countries in the West apprehending that undue lengthening of working hours results in a reduction of output have adopted additional shifts throughout the week, absorbing unemployed workers as well as training fresh workers for the industries. In Japan, the Ministry of Social Welfare is also persuading the industries to adopt shorter hours for the maximization of output. In India, we have depended far less on the introduction of the shift system and industrial education of new recruits, than on the prolongation of hours which will inevitably lead to lower per capita output and greater sickness and absence from work. Not only have the lessons of the last war been disregarded, but the salutary effects of the reduction of the number of hours since 1934 have also been ignored in India, where these were already much longer per week, viz. 54 hours, as compared with 48 hours in Great Britain, 40 in the U.S.A. and 36 in Soviet Russia.

Controls and restrictions are easier to impose during war time, and these should not be limited to the fields of trade and production but should also enforce minimum wages, overtime allowances, social insurance and other ameliorative measures. In fact the full pulse of war economy provides unique opportunities that must not be missed, for a vigorous and wide-minded labour policy in India. This is necessary in order that an increasing proportion of workers might reach the standard of efficiency of Western workers and might also form a permanent element of the urban population, now that in war time they are employed in much larger numbers than before in the organized industries. Thus success in the war industrial effort largely depends upon the implementing of judicious labour policy and legislation. On the other hand, hasty pieces of legislation like the adoption of 60 to 70 hours per week and the introduction of compulsory arbitration and enforcement of the award in the case of industrial disputes which has been effected by Section 81A of the Defence of India Rules do not augur well for smooth industrial relations. Strikes without notice are declared illegal but there is no machinery

created for preliminary discussion of grievances and disputes. Thus legal or illegal strikes do not show any diminution in number, while some are accompanied by rioting or mob outbursts. In the province of Bengal alone during the period of 1939 to 1943 there were on an average 162 strikes per year, of which the number in the jute mills averaged 33.4. The Government have no doubt taken power on the model of the Australian law to prescribe fair wages and fair conditions of service; but these measures remain almost a dead letter as no practical steps have been taken towards the establishment of minimum wage levels that are now guaranteed in different branches of industry in the advanced industrial countries. The economic injustice becomes all the greater on account of the high and rising profits of war industrialists, some of whom evade new industrial taxes by migration to the States on the one hand, and the absence of any machinery of adjustment of wage levels to the sky-rocketing costs of living on the other. In no industry have earnings increased adequately in relation to the rise of the cost of living and wherever there have been wage increments these have been given grudgingly. It is difficult to anticipate the condition of industrial employment in the immediate post-war period; it will largely depend upon the nature of the schemes of labour demobilization and industrial planning and on the co-operation between labour and management in social welfare and security projects, adopted for post-war reconstruction.

Wherever possible wages and other figures have been given for the recent war years in the general background of the conditions of industrial employment and remuneration that were stabilized before the war broke out. As a matter of fact during the war period there has been hardly any increase in the basic rates and wages. To counteract the effects of the sharp rise in the cost of living, compensation is given to the industrial workers in the form of dearness allowance, bonus and the supply of foodstuffs at concession rates. Changes in the total earnings within the present wage structure have been indicated as far as possible, though statistics are wholly inadequate. A fresh difficulty has arisen because of certain publications being discontinued or withdrawn

during the war period.

War-time labour policy, if it is to be easily dovetailed into a peace time plan, must cover the entire labour front. The forcible liquidation of strikes backed by penalization and legal action against unions without attempting at all to guarantee the basic human needs of a fair wage, decent housing, insurance against illness, or even benefit to women workers during pregnancy—is tackling the labour problem from the wrong end. Economic justice requires the safe-guarding of at least the workers' rights to self-organization, collective bargaining, and a living wage, before compulsory arbitration is adopted and enforced. Recently the International Labour Conference has formulated at Philadelphia a Social Charter for the Common Man setting forth guarantees of right to work, improved standard of living, minimum standards of employment, effective recognition of the right of freedom of association and collective bargaining; and has set forth the minimum obligations of Governments with regard to employment and labour conditions. It has also established the principle that Governments cannot be permitted to allow unemployment to develop unchecked or low living standards to persist, in view of the international consequences. The various economic and political rights are interdependent; but the basic right of labour that has not yet been established in India is the right to association or self-organization that gives every one who toils his due position of dignity in society. Freedom of association, free education, wholesome recreations, and insurance against sickness and unemployment are the first indispensable steps in the development of the charter of the Indian workers' freedom and welfare, and should be accepted as the major objective of post-war economic planning. On the other hand, to deny the labour movement the opportunity of expressing itself in fruitful constructive channels and thus drive it underground is to sow the seeds of revolutionary communism in the country.

For one thing is clear, viz. that the Indian working class now shows an increased desire to become more efficient and to earn higher wages, as well as a greater intolerance of unsatisfactory conditions of work, and inadequate housing,

medical aid and education. Not only does it want that the factories and mines become fit places for human beings to work in and its huts, tenements and settlements fit for human habitation, but it also demands that its social environment should be such as will enable it to play its due role as citizens in that new constitution of India which has given it new political power. The notion of a fixed standard of living for the Indian working class with its corollary that an improvement of wages leads to its idleness or extravagance is a half-truth, to which many employers still cling, and which is as economically perilous as socially disruptive. Even a cursory survey of the conditions of employment, standard of living and earnings of our industrial workers will convince any fair-minded person that Indian industry can advance only on the basis of a progressively higher scale of production, wages and standard of living. Industry cannot enjoy peace and prosperity so long as the elementary needs of the worker as a human being and not merely an instrument of production remain unsatisfied. On the other hand, it cannot afford the many essential securities, ameliorations and amenities to workers unless industrial peace is established. The foundations of industrial peace and progress accordingly rest on increased efficiency and improved standard of living and social security for the working class and enlarged and adequately distributed purchasing power for the entire population. The purpose of the book will be well served if it strengthens these convictions in the country.

My interest in the labour movement dates from the time, thirtyfive years ago, when I organized adult schools for the working class in Calcutta and its suburbs. Since then I have attempted to study labour conditions in the mines, plantations and factories in all parts of India, and much of the material of this book is based on first-hand investigations. My work in connexion with the Bihar Labour Enquiry Committee gave me an opportunity of investigating labour conditions in Bihar and Chota Nagpur, and to meet labour leaders and employers in both organized and unorganized industries. As a member of the Government of India Technical Committee on the cost of living of industrial workers and of the Post-war Reconstruction Labour Committee of the U.P. Government, I have had

more recently an opportunity of examining the labour reforms and policies now contemplated by the Government of India.

I cannot close without acknowledging the innate courtesy and goodwill of innumerable workers, men and women (and even children) in various parts of India whom I have had to interrogate during my enquiries, and whose troubles, fears and hopes I have tried to understand and depict in this volume.

University of Lucknow
April 1945

RADHAKAMAL MUKERJEE

CONTENTS

Chapter		Page
I THE AGRICULTURAL BACKGROUND		
pp. 1-17		
The Character and Volume of Industrial Employment	1	
Effects of Overcrowding in Agriculture ..	3	
Disparity between Rural and Urban Standards of Living	4	
Connexion between Agriculture and Industry ..	6	
Factors Determining a Permanent Industrial Working Class	8	
Statistics in respect of a Permanent Labour Force in Different Centres	10	
Need of Co-ordination between the Village and the City by Economic Planning	12	
II METHODS OF RECRUITMENT IN PLANTATIONS AND MINES		
pp. 17-32		
Old and Present Procedure of Recruitment of Garden Labour	17	
Abuses connected with Recruitment	20	
Feasibility of Establishment of Garden Labour Exchange	22	
Variety of Methods of Recruiting Colliery Labour	23	
The Importance of the Sardar	24	
Absenteeism in the Coal-Mines	25	
Its Causes and Consequences	27	
Plan of a Mining Labour Exchange	29	
Recruitment of Quarry Workers and its Abuses	31	
III METHODS OF RECRUITMENT IN FACTORY INDUSTRIES		
pp. 32-47		
Recruitment by the Contractor in Organized and Seasonal Industries	32	

Chapter		Page
The Jobber as the Recruiter		34
Decasualization of Badli Labour in Bombay and the C.P.		36
Relation between Corruption and High Turn-over		37
Effects of High Rates of Turn-over and Absenteeism		39
Need of Labour Exchanges in India		42
The present chaotic state of Recruitment and Employment		44
 IV CONDITIONS OF EMPLOYMENT		pp. 48-69
Leave and Holidays with Pay		48
Continuity of Service		50
Absenteeism and Irregularity of Employment in the Coal-Fields		52
Chronic Shortage of Tubs		54
Leave with Pay in the Engineering Industry ..		56
Need of Rationalization of Leave		59
The Provident Fund and Gratuity Systems for Workers		61
Nature and Procedure of Punishment in Industry ..		63
A Graded System of Promotion		66
 V CONTRACT LABOUR		pp. 70-86
The General Vogue of Contract Labour ..		70
Contract Labour in Quarries and Mines ..		71
Need of Regulation of Quarry Labour ..		73
The Raising Contractor in the Colliery ..		75
Necessary Steps for the Elimination of the Rais- ing Contract System		77
The Role of the Sardar as an Intermediary ..		79
Contract Labour in the Sugar Industry ..		80
Need of Regulation of Contract Labour ..		81
Lines of Regulation of Wages and Conditions of Employment of Contract Labour		83

Chapter		Page
---------	--	------

VI WOMAN AND CHILD LABOUR pp. 86-100

Employment of Women and Children in the Plantations	86
Women and Children in Factories and Mines ..	87
Economic Consequences of the Exclusion of Women from Underground Work ..	88
Their Remedies	91
Reduction of the Employment of Children in Mines and Factories	92
Women and Children in the Mica Industry ..	94
Women and Children in the Shellac and Bidi Industries	96
Women in the Rice-Milling Industry	98
Control of Non-regulated Factories	98

VII WAGES IN THE PLANTATIONS AND QUARRIES pp. 100-117

Piece Rates of Wages in the Tea Gardens: Basic and Ticca	100
Difficulty of Estimating Real Wages	102
Need of Fixation of Minimum Wages	106
Conditions of Employment and Wages in the Quarries	110
Standardization of Tubs and Trolleys	113
The Abolition of the Contract System	114

VIII WAGES IN THE COAL-FIELDS pp. 117-130

Difficulty of Ascertaining the Earnings of Individual Miners	117
The Practice of Overloading	119
Decline in Miners' Earnings	120
Causes of Low Earnings	124
Shortage and Irregularity in the Supply of Tubs ..	125
Absenteeism	128
The Chaotic Character of Coal Industry and Trade	129

Chapter		Page
IX MINIMUM WAGES FOR MINERS		
	pp. 130-138	
Comparative Wage Level in Mining and other Industries	130	
Principles of Minimum Wage Fixation .. .	132	
Division of Minimum Wage into Basic and Additional Piece Rates	133	
Introduction of Check Weighment .. .	135	
Regulation of Coal Output and Prices .. .	135	
X WAGES IN THE TEXTILE INDUSTRY		
	pp. 139-160	
Disparity of Earnings in the Textile Industry in Different Centres	139	
Causes of Diminution of Earnings .. .	143	
Minimum Wages in Bombay .. .	145	
Need of Standardization of Jobs and Wage Rates	147	
The Scheme of Standardization in Ahmedabad	151	
Earnings in the Jute Industry .. .	153	
The Chaotic Wage System .. .	159	
XI WAGES IN THE ENGINEERING AND METALLURGICAL INDUSTRIES pp. 161-178		
Wage Level in the Engineering Industry in Different Countries	161	
Movement of Wages and the Cost of Living ..	163	
Wages, Efficiency and Profits .. .	165	
Bonus Schemes	169	
The Living Wage	171	
XII THE APPROACH TO A NATIONAL MINIMUM WAGE		
	pp. 178-220	
Difference in Wage Level in the Major Provinces	178	
Methods of Devising a National Minimum Wage Scale	180	
The Basic Energy Requirement for Indian Workers	181	

Chapter		Page
Energy Requirements according to Occupations		183
The Indian Dietetic Norm, Vegetarian and Non-vegetarian		187
A Typical Poor Diet		189
The Average Consumption Units in a Working Class Family		190
Clothing and Housing Norms		191
Calculation of the National Minimum Wage ..		193
Rise in the Cost of Living in War Time ..		195
Inadequacy and Lack of System in the Payment of Dearness Allowance		197
Women's Minimum Wage		205
Women's Lower Wages		206
Children's Wages		210
Need of Abolition of Sweating		211
Abridgement of Gap between the Minimum Wage and Current Wages		212
Manner of Implementing the Minimum Wage Policy		215

XIII RATIONALIZATION AND INTENSIFICATION pp. 221-240

Machine and Society	221
From an Unskilled Worker to an Expert Mechanic	222
Efficiency and Talents of Indian Workmen ..	225
Rationalization in the Textile Industry ..	227
The Vogue of Intensification	231
Need of Sharing the Gains of Rationalization between Management and Labour	233
Intensification in the Engineering Industry ..	234
Controlled vs. Uncontrolled Rationalization ..	238

XIV THE STANDARD OF LIVING pp. 240-269

Wages and the Scale of Family Living ..	240
---	-----

Chapter	Page
The Indian Worker's Joint Family	242
Classification of Workers into Income-Groups ..	243
Comparison of Budgetary Position of Indian and Foreign Workers	248
Analysis of the Indian Workers' Expenditure on Food	249
Diet and Industrial Efficiency	251
Effects of Dietetic Differences in the Same Industrial Area	252
Diet and Income	254
Lower Nutrition Level of Indian Workers ..	255
Relation between the Improvement of Income and of Nutrition	256
The Standard of Clothing	257
Expenditure on Health, Education and Recreation	258
The Need of Wholesome Recreations	263
Control and Reduction of Indebtedness ..	265

XV HOUSING	pp. 269-296
Classification of Industrial Housing Problems ..	269
Slums in the Principal Cities and Industrial Towns	270
The Bustees of the Hooghly Riverain ..	275
The Cheries of the South Indian Towns ..	278
The Dhowrahs of the Coal-Fields ..	280
The Leafy Shelters in the Quarries ..	283
The Bustees and Barracks of the Plantations ..	285
Programme of Housing Development: Improvement or Development Trust Housing ..	286
Municipal Housing	288
Employers' Housing	290
✓ Mortality and Housing	291
The Prevalence of Vice	293
Housing Problem, Central for the Efficiency of the Worker	295

Chapter		Page
XVI SOCIAL WELFARE AND SECURITY pp. 296-325		
Legal and Actual Hours of Work in India ..		296
War-time Hours in India and in Other Countries ..		298
Need of Organized Rest-Pauses		300
Need of Improvement of Lighting and Ventilation		301
A 'Reasonable' Temperature		302
Other Improvements of Working Conditions ..		304
Regulation of Load and Shelter		305
Extension of the Factories Act to Small-scale Establishments		307
Revision of the Indian Mines Act		308
Adult Education: Night Schools and Technical Classes		309
Inadequacy of Medical Care		312
Existing Sickness Benefit Schemes		314
A Scheme for Compulsory Sickness Insurance ..		316
Provision for Old Age		319
Unemployment Insurance		321
Responsibility of the Employers and the State towards Social Security		322
XVII TRADE UNIONISM	pp. 325-343	
Early Social Welfare Work among Labourers ..		325
Difficulties of Early Labour Unions		326
Obstacles to the Growth of Trade Unionism ..		328
Victimization and Establishment of Rival Unions ..		330
Prohibition and Restraint of Meetings ..		331
Prevalence of Victimization of Unionists ..		332
Necessary Measures to Prevent Victimization: American and Indian Models		333
The Magna Charta of American Labour		335
Compulsory Recognition of Trade Unions		337
The Question of 'Outsiders'		338
Instance of a Strong and Effective Trade Union ..		339
Need of the Union's Social Welfare Programmes ..		340
National Federations of Unions		342

Chapter		Page
XVIII INDUSTRIAL PEACE	pp. 344-370	
General Causes of Strikes	344	
Important Strikes and their Consequences ..	345	
Machinery of Industrial Conciliation: (A) <i>The Works Committee</i>	350	
Machinery of Industrial Conciliation: (B) <i>The Trade Union</i>	352	
Notice of Strike and Conciliation	353	
The Conduct of a Strike	354	
Definition of Peaceful Picketing	355	
Other Safe-guards of the Workers' Rights ..	355	
Safe-guards for the Operation of Essential Processes of Plants and Utility Services ..	360	
Scrupulous Neutrality of the Police and the Magistracy	361	
<i>Machinery for Discussion and Settlement of Industrial Disputes</i>	363	
Defects of the Trade Disputes Act	364	
INDEX		371

CHAPTER I

THE AGRICULTURAL BACKGROUND

The Character and Volume of Industrial Employment

The development of an industrial working class is relatively new in India. The working class in this country has been predominantly agricultural. Large-scale manufacturing methods have been imported from other lands without a gradual upbuilding of an industrial labour population. For a long time, due to the pressure on the land, India showed a surplus population in the villages who owned no land or were dispossessed. Many were absorbed in the handicrafts and karkhanas where they worked on the wage system under master artisans, karkhanadars and financiers. Thus the balance between agriculture and industry was well maintained till the last decades of the 18th century, up to which variegated muslins, calicoes, chintz, silk goods, saltpetre and other products of Indian cottages and karkhanas were sold in the markets of Europe, West Africa, Egypt, Persia and Central Asia in the West, and Further India, the Indian Archipelago and Japan in the East. In the 17th and 18th centuries India was in fact the industrial workshop of the world. But with the gradual decline and ruin of Indian handicrafts and rapid increase of population from about 130 millions at the time of the Battle of Plassey (1757) to 254 millions in 1881, industries on a small scale could not give adequate and regular employment to the growing landless class. It was this class which, with the abolition of slavery in the British colonies in 1830, emigrated from India under the system of indenture to overseas countries. Between 1834 and 1837 about 19,000 labourers were exported to Mauritius and Bourbon. This stream of migration of Indian workers overseas may be regarded as the first exodus of Indian labour from the fields to organized industry. Such rural exodus has since continued. In the middle of the 19th century large-scale 'productive works' during famines, and irrigation, road and railway developments in normal times maintained a steady demand for workers from the fields in India. Then other branches of organized industry

were gradually established in the country, creating a constant and increasing flow of migration of the working class from the villages to the cities and towns of India. In 1931 there were 31.5 million agricultural labourers in India of whom 23 millions were estimated to be landless; while the total number of non-agricultural labourers was 25 millions. Thus the total working class population comes to 56.5 millions out of 156 millions persons engaged in all occupations in India. More than one-third of the population engaged in all occupations depends upon wage labour as a means of livelihood. Of the 25 million non-agricultural labourers at least 16 millions are engaged in industrial establishments comprising cottage industries, workshops and large industrial concerns. Of these the number employed in the factories, both seasonal and perennial, was 2,281,563 in 1942. During the period of the war there has been a considerable expansion of industrial employment. The ordnance factories have increased their labour force by about 600%, employing 47,000 trained workers, 3,500 semi-skilled workers and 7,000 more in the supervisory and skilled and higher semi-skilled grades. In the U. P. alone the total number of factory workers increased from 155,000 in 1938 to 254,000 in 1943. This includes Government factories in which the number increased from 10,000 in 1938 to 60,000 in 1943. If we take a long range view, we find, however, that during recent decades, there has been a decline of the relative proportion of industrial employment, both large-scale and small-scale, as will be evident from the following Table (1).

Decline of the Proportion of Industrial workers to the Total Population in India 1941

	1911	1921	1931	1941 Estimate
Population (in millions) ..	315	319	353	400
Working population (in millions) ..	149	146	156	170
Persons employed in industries (in millions) ..	17.5	15.7	15.3	16.0
Percentage of workers in industries to the working population	11.0	11.0	10.0	9.4
Percentage of industrial workers to the total population	5.5	4.9	4.3	4.0

Effects of Overcrowding in Agriculture

Small and medium-scale industries have declined while population has shown a large uninterrupted expansion. This has thrown upon agriculture a greater burden than before, leading to poverty, unemployment and indebtedness as well as a steady drive of people attached to the land to the factories and the towns. It will be sufficient to adduce only one instance, viz. the migration from the overcrowded agricultural tracts of the U.P. to the industrial centres prior to the period of the last industrial depression. 'It is said by some one,' wrote Edward Blunt in the Census Report of 1911, 'that there is not a single family in the Benares division which has not at least one member abroad in Bengal and Assam.' Five districts, viz. Ballia, Ghazipur, Benares, Azamgarh and Jaunpur accounted for 125,539 immigrants to only three districts in Bengal, viz. Hooghly, Howrah and 24 Parganas studded with the riverain industrial towns and to Calcutta in 1921. In the decade 1911-1921, 338,000 emigrants left the U.P. for Bengal, 77,000 left for Assam, and 115,000 more for Bombay. 99,853 immigrants came to Cawnpore district from other districts of the U.P. in the same decade: of these 52,889 were women. In 1921-1931 the emigration to Bengal, Assam and Bombay was 344,000, 68,000 and 135,000 respectively. The flow of labour was reduced due to a restricted demand caused by trade depression. But the emigration to Cawnpore district from other districts of the U.P. was accelerated, the figure being 166,254 persons. It is the landless labourers who are the first to migrate to the industrial centres, followed by cultivators of small uneconomic holdings who migrate during the slack season, or when drought or famine overtakes agriculture, and the trend of migration tends to be larger the greater the pressure of population on the soil or the more serious and wide-spread an agricultural calamity.

It is in this larger background of a greater overcrowding in agriculture and economic pressure in the villages that the problems of the Indian industrial working class have to be primarily envisaged. It is true that when organized industries are started in the virgin jungle or the rural area attractive wages have to be given in order to draw agricultural workers

from the fields and villages. But gradually as the industry is established the higher wages in the industrial establishments lead to a general rise of the scale of agricultural wages in the area. This favourable reaction of the relatively higher earnings of industrial workers on rural wages and standard of living is, however, not discernible in zones of heavy population-pressure and agricultural stagnation and idleness. Here the continuous and plentiful supply of migrant workers from the country-side checks the rise in industrial wages which maintain a parity with the rural wage scale. The state of agriculture, the degree of overcrowding in the land, the land system, the number of the landless class, the progress of industrial development in the province or region and other factors determine the reciprocal reaction between industrial and agricultural wages at different centres and in different periods of time. There are industrially backward provinces in India, such as the U.P., Bihar, Bengal and Madras, where the wages and standards of living of industrial workers are constantly being attacked by the steady migration of the landless classes crowding before the city factory gates in vain search for employment. Harold Butler has well observed: 'The standards in the cities are necessarily influenced by conditions in the country-side. As long as the village remains as backward in these respects as it is at present, it is difficult to see how the wages and manner of life of the urban worker can be substantially improved. His standard of living is constantly threatened by the influx of fresh workers from the country, anxious to get a job at almost any price, prepared to lodge in the most insanitary hovels and unaccustomed to any form of modern social organization.'¹

Disparity between Rural and Urban Standards of Living

Perhaps there is no region in India where there is a greater disparity between rural and urban wages and standards of living than Bihar. It will, therefore, be of interest to give an account of the wages and economic status of agricultural workers in different tracts in Bihar which largely explains the lower scale of wages and manner of life of indus-

1. "Problems of Industry in the East," p. 8.

trial workers in this province, as compared with the rest of the country.

In Bihar and Orissa the number of agricultural labourers is 3.97 millions; these increased by 19 per cent between 1921 and 1931, and now form 19 per cent of the total agricultural population. For every 25 non-cultivating landlords and tenants, there are about 725 agricultural labourers in Bihar as compared with 200 labourers in the U.P. As the pressure of population on soil increases and holdings become subdivided and uneconomical more tenants join the vast army of agricultural labourers, or become earth-diggers, carriers (rejas) and road menders, or leave for Bengal and Assam for domestic service, mining, plantation and other labour. Many coolies who do earth work in winter are also agricultural labourers and if such unspecified labourers be included, the agricultural labour population would be not less than 5 millions out of 13.3 millions of agriculturists. The population of women labourers is high—75 per 100 men.

The economic condition of the bulk of agricultural workers approximates to virtual slavery in considerable parts of Bihar and Orissa. Where wages are paid in cash they earn only 9 pies per diem together with a seer of cereal or only 1 anna in the aggregate. In such districts as Muzaffarpur, Darbhanga, Bhagalpore and Monghyr hereditary bond-slaves still exist with a burden of debts usually incurred for marriages going back to five generations; they are often assigned 1 to 5 cottahs of bad land and paid an anna or 2½ seers of cereal per diem, which they forfeit when there is no work in the fields. The lowest depth of servitude is, however, reached by the Kamias of South Bihar and Chota Nagpur and the Gotes of Orissa. Once their ancestors obtained small loans from their landlords for marriages, and became their bond servants. Their sons, grandsons and their wives still remain in servitude. The Kamiauti Agreements Act abolishing agrestic serfdom in Chota Nagpur is a dead letter. Oral indentures entered into on the Pous Sankranti still persist and the farm hands live like the Negro slaves, bound hand and foot to the Zamindar. The Kamia cannot escape from his clutches, for where can he find the cash to pay interest

on the loan he has been advanced, not to speak of the repayment of the principal? Social degradation and economic bondage are in nefarious combination in aid of the landlord-cum-money-lender for the servitude of a considerable section of the agricultural workers, belonging to the Dosadh, Chamar, Musahar, Bhuiya and Tatwa castes in Bihar as well as the aboriginal tribes in Chota Nagpur. On the other hand, it is these depressed castes and semi-Hinduised aborigines, who most welcome the opportunities of work and wages in the mines, factories and plantations where they are freed from the social shackles. In the coal-fields of Bihar a recent survey has shown that such depressed castes as the Bhuiyas, Bauris, Manjhis, Chamars, Rabidas and Dosadhs form 50.3 per cent of the Hindu working class families.

Industry naturally and sternly takes advantage of the low scale of agricultural wages in the country-side, while due to the high cost of living in the towns industrial workers are at a serious disadvantage. There are, indeed, few provinces where there is such chronic industrial discontent.

Connexion between Agriculture and Industry

Though the flow of migration from the fields to the factories and back is largely dominated by such agricultural conditions as the chronic pressure on the land, the proportion of uneconomic holdings, indebtedness, drought and other vicissitudes in agriculture, there is no gainsaying the fact that wherever organized factory industries have stabilized themselves these have attracted a permanent industrial population. Thus the connexion between the village and the factory chiefly depends upon the type of industries and the stage of industrial development. There are the seasonal industries dealing largely with the processing of agricultural products, such as sugar factories, rice mills, cotton ginneries and presses, and shellac factories. Here the demand for labour is seasonal. Those who are essentially agriculturists and cultivate small plots of land in the surrounding villages here secure an income from industrial work, and sometimes members of the same cultivator's family relieve one another by turns in industrial employment. In no field of industry are wages lower than

in these seasonal establishments. The earnings of the unskilled workers in the rice mills in Bengal and Bihar go down to four or five rupees per month. In the sugar factories in Bihar, the average wages of the unskilled workers come to only seven or eight rupees per mensem. In the cotton ginning and pressing and other seasonal factories in the Bombay Presidency unskilled workers obtain only 4 as. 11 pies as compared with the average agricultural wage of 4 as. 7 pies in the province, and Rs. 20 per mensem as the minimum wage in the city of Bombay.¹ In Madras, in the groundnut, gin, oil and rice factories the wages are the same as those in the surrounding areas. But at harvest time one or two annas more than the field rate have to be given to keep the labour. Wherever the connexion between agricultural and industrial work is the most intimate, the wages and the manner of life of industrial workers are the lowest. In the collieries though a proportion of the mining labour force is gradually settling down, there is a considerable proportion of workers, varying according to localities and mines, which is directly connected with agriculture. It is interesting to note that in the collieries at Jarangdih in Bihar as much as 70 per cent of the miners are also cultivators working in their agricultural holdings in the morning from 6 to 9 a.m., and entering the pit in the noon and afternoon. In the paddy-sowing season, however, the attendance is reduced to about one-third. This also holds good of many workers in the mica mines who are cultivators-cum-miners. But the bulk of the mining labour force in Jharia migrates seasonally between the fields and the collieries. An enquiry into 1,030 miners' families in Bihar has revealed that 59 per cent of these miners belong to the landless class, while another 24 per cent have migrated to the collieries because the family agricultural holding cannot support them. For another 6 per cent the migration to the colliery is due to the necessity of paying off arrears of rent and the money-lender's dues. Out of 1,030 families enquired into 440 families or 42 per cent have never left the coal-fields for visits to their villages. 57 families are found to be visiting their homes

1. 'Mofussil Labour and Wages in the Province of Bombay', 1940-41, "Labour Gazette," December 1941.

only once in three years or at longer intervals. Thus 497 families or 48 per cent of the total labour supply may be regarded as permanently settled in the coal-fields of Bihar. It appears that the mining labour population is most stabilized in the Giridih coal-fields.

Factors Determining a Permanent Industrial Working Class

Now in respect of the labour employed in the factory industries, the proportion of workers who form a part of the permanent urban population depends upon a variety of economic and social circumstances, the chief of which are the proximity of the industrial centre to areas of heavy population pressure, the establishment of a factory industry in a virgin region, and the preponderance of immigrants from distant areas in the labour supply. Ahmedabad, Nagpur, Madras and Cawnpore illustrate how the stability of the labour force is due chiefly to their drawing supplies from surrounding areas where there have been heavy overcrowding in agriculture and increase of the landless agricultural labourers. The bulk of them forms the unskilled category in the factories of industrial towns and cities. While they are attracted by the lure of higher wages, the instability of their employment, chronic house famine and high rents prevent them from settling down and bringing their families from the villages. Among this class the disparity of proportion of sexes is the largest. But there are certain castes who due to social factors have advantages in work in certain branches of organized industry. Thus the hereditary weavers from the districts of Benares, Fyzabad and Hardoi, ousted from their handicraft in competition with the power-loom, have secured remunerative employment in cotton mills of Cawpore. The Chamars, Pasis, Koris, Lunyas and other depressed castes have joined the tanneries and brushware factories in large numbers. It is significant that in Cawnpore 60 per cent of the women workers who number in the aggregate about 1000 in the organized industries as compared with 65,000 men workers, belong to the backward or untouchable castes—the Koris, Shaikhs, Pasis and Bhangis. Similarly, of the men operatives about 30 per cent belong to the depressed castes, of whom about half belong

to the Kori caste. The untouchable castes, especially the Mahars who have joined the throstle department in the textile industry also represent the majority of the labour force at Ahmedabad and Nagpur. Gradually the labour force gets more accustomed to urban conditions, and there is less of contact with the villages except in the harvesting season. In Cawnpore it is estimated that at least 30 to 38 per cent of the workers regularly return to their villages for harvesting, and substitutes have to be secured in their places. But a section of the labour force has permanently settled, and there is always a large number of workers in search for employment waiting at the factory gates in this city. Jamshedpur, Kolar and Digboi are instances where the industries being started in practically virgin forests had early to begin with a stable labour population. Bombay and the Hooghly riverain recruited their labour for their expanding industries from distant regions and provinces. Labour drawn from great distances tends to be stay-at-home in the towns. Thus industrial operatives in the Bombay mills coming from Ratnagiri, Ahmednagar and Poona and also from the U. P., and workers coming to the string of towns from Bandel to Budge Budge and to Calcutta from the western districts of Bihar and the eastern districts of the U.P., tend to settle permanently. The members of their families still carry on agriculture, but it is the regular remittances from the industrial workers which maintain uneconomic agricultural holdings and pay the landlord's dues, whether in the overcrowded districts in North Bihar or in the infertile lands of Ratnagiri and Ahmednagar. Or again, it is from those villages whence the first migrants went to Bombay and Calcutta that relations still pour in as agriculture suffers the least due to drought or flood, to seek industrial employment in the towns. How industry supports small farming in India is roughly indicated by the amount of remittances of workers in the jute mills of Bengal to their villages. The following represent the amounts of money forwarded by money orders from the various Post Offices serving the mills under the Indian Jute Mills Association during the decade, 1933-1942 :

<u>1933</u>	..	Rs.	<u>1,40,04,591</u>
<u>1934</u>	..	"	<u>1,46,34,342</u>
<u>1935</u>	..	"	<u>1,47,02,860</u>
<u>1936</u>	..	"	<u>1,55,39,610</u>
<u>1937</u>	..	"	<u>1,63,65,850</u>
<u>1938</u>	..	"	<u>1,68,48,063</u>
<u>1939</u>	..	"	<u>1,69,49,026</u>
<u>1940</u>	..	"	<u>1,82,08,855</u>
<u>1941</u>	..	"	<u>1,87,15,250</u>
<u>1942</u>	..	"	<u>2,32,68,377</u>

Although all the mill-towns and villages in the Hooghly riverain are inhabited predominantly by the jute mill workers, some remittances must have been sent by traders, merchants and the professional classes. In 1942 the total number of workers in the jute mill industry was 280,779. Thus the amount of remittance per annum per worker was about Rs. 82 or about Rs. 7 per mensem, assuming that the money orders were sent exclusively by the workers. Much of the income as well as capital invested in agriculture in the northern districts of Bihar and the eastern districts of the U.P. come from the coal and jute mill industries. On the other hand, the industrial worker has his misfortunes. Illness and maternity normally and epidemic, strike, lock-out or unemployment periodically send him back to his village home, which provides a sort of insurance against the effects of economic fluctuations or the hygienic dangers of many industrial towns and villages that have multiplied 5 to 10 times in population in one decade. It has been observed that quite an appreciable proportion of the jute mill workers obtains an annual holiday of one to three months, while the holiday exodus from the Hooghly area shows its peak during a slack season for agriculture in the workers' villages.

Statistics in respect of a Permanent Labour Force in Different Centres

Statistics in respect of the permanent dwelling of industrial workers in the cities and towns of India are not available. It appears that Ahmedabad, Nagpur and Madras are the centres where the largest proportions of industrial workers

are permanent residents. It is estimated that 20 per cent of the working class population in Ahmedabad are permanent. Much depends upon the housing accommodation available in the cities and towns. Where housing conditions are unsatisfactory or deteriorated due to the increase of population and lack of any housing scheme, the working class which has tended to be stabilized suffers most from the effects of urban overcrowding. It is estimated that in Ahmedabad there is a deficit of 20,0000 working class tenements; while rent shows a continuously increasing trend. It is noteworthy that whether in Ahmedabad, Nagpur, Madras or Cawnpore, it is the depressed castes and the Muhammedan weavers and leather-workers who had always slight or precarious connexion with the land, and also suffered from various social and economic disabilities in the villages that comprise dominant permanent elements of the urban population among the working class. Even in the coal-fields of Giridih in Bihar, it is the Muhammedans who predominate among the permanently settled mining labour force.

Jamshedpur is the only other industrial town for which some statistics in respect of the stabilization of the labour force are available. 1,040 family budgets were collected from the Jamshedpur centre (including Ghatsila and Mosabani representing 48 and 114 budgets respectively) which showed that 935 families or 90 per cent of all the workers have come from other provinces that include such distant areas as the N.W.F. Province, the Punjab, Madras and Assam. Aborigines, especially the Hos of Singhbhum, Seraikela, Mayurbhanj and Rajkharawan, represent 10 per cent of all the workers mostly belonging to the unskilled category. These aboriginal labourers are mostly landless but a few still cultivate small strips of land. The uneconomic character of their holdings and the uncertainty of employment in agriculture which is of a primitive kind has driven them into factory work. With regard to the connexion of the working class families with their village homes, it is found that 221 families or 23 per cent of the migrant workers do not visit their homes at all, and 183 families visit once in 3 years or at longer intervals. Thus 39.3 per cent of the workers may be considered as the per-

manent labour force of the Jamshedpur area, including, of course, the aborigines who come to work in the various organized industries from the surrounding villages. For Jamshedpur or Tatanagar town proper, the percentage of the settled population will be higher. This must be considered as a remarkable phenomenon since Tatanagar has sprung up almost in the wilderness, and is a town predominantly of immigrants who constitute, as we have seen, more than 90 per cent of its population. It may be noted here that there are few towns in India where the bicycle is such a common vehicle. Several thousands of workers come from their homes to their factories and return on their bicycles as they do in the industrial towns of Holland and Japan. The Tata Iron and Steel Co. has built 6,500 quarters for the working class which, however, house only 30 per cent of its permanent workers. There is distinct shortage of housing accommodation; while the rents are too high. Jamshedpur has also its slums, the bustees of Kasidih and Mohulbera with 1,200 huts where as many as 8 persons live in a single room, and house-taps and latrines are far too few. The Company arranges for the public utility services of the town and has invested large sums in its drainage, water supply, electric supply and sanitation. But its policy of charging high shop rents and markets dues has raised the general cost of living of the town to a higher level than is justified by the isolation of the town from the larger wholesale markets. It is necessary for the Government to consider the feasibility of establishing a Municipality in Jamshedpur which may take over from the Company the essential services and arrange with it for the gradual repayment of its capital invested for municipal purposes.

Need of Co-ordination between the Village and the City by Economic Planning

It will appear from the above survey that in various industrial centres where a definitely urban class of industrial workers divorced from the villages is springing up, the chronic house famine, dirt and insanitation, coupled with the complete absence of any town-planning, have contributed to undermine the health and morals of the working class popu-

lation. The Royal Commission on Labour raised this practical question of vital importance for the future of Indian industry and labour: 'Should efforts be directed towards building up an industrial population divorced from the villages, or should the existing contact be maintained and stimulated? This is a question which must be faced in any intelligent attempt to view the problems of Indian labour as a whole and we are surprised to find how little attention it has received. Our considered opinion is that in present circumstances the link with the village is a distinct asset, and that the general aim should be not to undermine it but to encourage it, and as far as possible to regularize it.'¹

It is quite obvious that the advantages of the Indian industrial workers' village connexions cannot be conserved, far less increased, without industrial planning and regional redistribution of Indian industries. If India is to escape from the deleterious social consequences of unplanned industrial development and of the concentration of population in a few bee-hive industrial towns, the future industrial policy should aim at the transference or creation of organized industries near the sources of their raw materials and labour market. In Russia the cotton mill industry has been brought, for instance, into the cotton producing belt in Central Asia and Trans-Caucasia. In the northern part of Ukraine the production of beet and the sugar industry have been concentrated and there are also being developed on a larger scale than before the animal products industry, packing houses, canneries, etc. In India, cotton, juté, silk and woollen manufactures, soap, oil, sugar, leather and tobacco industries may all be developed in rural areas and the growth of such light industries co-ordinated with the long established handicraft and cottage industries in the villages. The development of hydro-electricity may especially be looked at from the point of view of industrializing the country-side and carrying out an industrial integration between the heavy and light industry, agricultural industry and rural craft, which is now so sadly lacking in the industrial structure in India. In Japan about 85.6 per cent of the total number of establishments employed less than

1. Report of the Royal Commission on Labour in India, p. 20.

30 workers each and 10.7 per cent employed from 30 to 99 workers each in 1934. The proportion of factories employing less than 200 workers constituted 98.1 per cent of the total number of factories and these employed 56.9 per cent of the total number of workers.¹ Thus Japan in spite of her striking advance towards industrialization, remains overwhelmingly a country of cottage industries and small workshops, many of which are however linked with big establishments in the industrial cities. Many branches of manufacture are carried on effectively in cottages and workshops in rural areas in Germany, Belgium, Holland and Czecho-Slovakia. Large-scale industrial enterprise and widely distributed workshop and homecraft activity help, instead of ousting, each other. In Germany at least 8 million people, i.e. 12.6 per cent of the total population, derive their living from handicraft work. In Westphalia the development of mining and metallurgy displaced the small-scale extraction and manufacture of raw and semi-processed materials but has now nurtured the flourishing cottage and workshop production of finished cutlery. Similarly the rural cottage industries of watch-making in the Black Forest and the production of cheap musical instruments in Saxony and Wurttemberg have been aided by the large industry.

In both Czecho-Slovakia and Wurttemberg important industries are located in the country-side, enabling workers to combine farming in small plots of land, poultry-keeping and livestock industry with factory work. Bicycles carry them from the neighbouring villages to the factories which employ them for 5 to 6 hours a day and which sometimes work two shifts to suit their convenience. Such small industrial towns with their fine gardens, parks, cottages and opportunities of social recreation present a striking contrast to the uncleanliness and squalor of the big industrial cities and conurbations. Mass production and industrial concentration are not the only methods of industrial advance. That mistake, which was committed in certain parts of western Europe, is now being corrected. It must not be repeated in this country. Light

1. Yoshio Kami: 'Industrial Transformation in Japan', International Labour Review, October 1939.

railways, trains, steamers and buses should bring workers in India daily to the factories and back to their villages, as in so many industrial countries in the West. Even in India we have the example of steamers and boats plying along the Hooghly laden with industrial workers as passengers who are brought morning and afternoon from the riverain villages to the jute mill centres. To Birlapur, for instance, come from thirty villages within a radius of 10 miles on foot or by boats some three thousand workers out of a total labour force of 6,500 persons. Similarly the factories at Chengail, Fuleswar, Bauria and Nungi are situated in rural areas on the bank of the Hooghly attracting idle or semi-idle hands in agriculture since they offer an opportunity for supplementary work and earnings. Most of the workers are agriculturist-cum-mill-hands. For the immigrant workers from Bihar, the U.P. and the C.P., Nungi and Birlapur provide housing accommodation of a standard much higher than one is familiar with in the Calcutta industrial belt. In the district of Dacca the Dhakeshwari and Chittaranjan Cotton mills located on the bank of the river fully exploit the presence of a large surplus labour force in agriculture that comes regularly for factory work from long distances in numberless small country boats. Thousands of industrial workers come to Bombay city from distant villages and towns availing themselves of the electric railways, trams and buses. At Jamalpur and Monghyr some villages send out 200 to 1,000 workers who have free railway journey in workmen's trains plying along three branches of railway lines. Even villages in the district of Bhagalpur are served by these workmen's trains, carrying workers from their village homes. Out of 1,000 workers who come daily from a single old village at a distance of some 20 miles from Jamalpur or Monghyr 150 have small agricultural holdings which are cultivated by other members of the workers' families or on a produce-sharing basis. The incomes of cultivators and industrial workers are pooled in order that rents and debts be paid off or new lands acquired. As they rise from unskilled or semi-skilled hands to skilled workers in the factories, their earnings show an appreciable increase. We have visible evidence of this in the villages in the construction

of pucca houses or better built huts, in the general desire for education and in the improvement of the standards of living. Not merely do the industrial workers bring an additional income to the villages, but where there are facilities of cheap or free transport which enables them to live in their village homes, they introduce into rural society new freedoms and new outlooks.

War production in India has now broken down the traditional grooves in Indian craftsmanship. In the various parts of India small-scale rural and urban artisans have shown a flexibility and adaptability to mass production methods which have been astonishing, working to capacity and making the most of existing skill and resources. It has been estimated that the small artisans and workshops are now producing cotton textiles, woollen blankets, leather goods, camouflage nets and pith helmets worth Rs. 10 crores. In the villages women help men to make camouflage nets, durries, coir mats, knives, forks or sandals by the million. As the war proceeds the small-scale industry will contribute an increasingly greater proportion to the volume of war production. The next step in industrial planning should be to form the artisan groups and small workshops into industrial co-operatives, so as to mobilize more labour, disperse production and relieve larger factories for other work during the war. It is not through sub-contracting, nor through the official agency of the Industries Department, but through the development and integration of industrial co-operatives as in China, that we can best mobilize national resources during the war and at the same time bring India to a more fully mechanized and industrialized state after the war.

Planned industrialization in India will, in the first place, integrate the small cottage and decentralized industries with the bigger factories and workshops, bringing craftsmanship up to mass production standards and rehabilitating the former in both the urban and rural economy of the land. This would make the transition to full industrialization easier and at the same time combat the social dangers that are associated with large-scale industrial production concentrated in a few great industrial cities and towns. Secondly, it will bring about a

close connexion between agriculture and industry through the processing of agricultural products and raw materials. In many agricultural countries in Europe there is established such an intimate relation between agriculture and industry that it is at times difficult to draw the line between the spheres of the two. Industry helps in the handling of the produce, supplies the farm with fertilizers, feeding stuffs, machinery and many other subsidiaries and materials. On the other hand, agriculture supplies industry with some of its raw materials. Dairies and milk condensation and powder factories, factories for the preparation of organic therapeutic products, the edible oil industry, milling, canning, chocolate and tobacco industries are all an outcome of the correlation between agriculture and industry in Europe, which has been long overdue in this country. The bee-hive city of 19th century industrialism has been a parasite in India, draining the wealth and vigour of the population of its victims, the hundreds of villages in its hinterland. With a new orientation and co-ordination between the city and the village in the future, we shall find that the science and technique of the city will utilize the resources and raw materials and replenish the wealth of the village more than it will exhaust, and its life will stimulate the minds and enlarge the vision of a far greater number of people than it will warp or repress.

CHAPTER II

METHODS OF RECRUITMENT IN PLANTATIONS AND MINES

Old and Present Procedure of Recruitment of Garden Labour

The crux of the problem of recruitment of Indian industrial labour consists in maintaining an unremitting and increasing flow of immigrant agriculturists and villagers to the centres of industry, some of which are far distant from the large human reservoirs in the densely populated or relatively infertile zones of India. Naturally, therefore, recruitment is more difficult and methods of obtaining labour

have been more effectively organized for plantations, mines and ores. Not merely distance but the unhealthiness of tea, coffee and rubber gardens in a damp climate, and the fear and reluctance of the peasants to undertake underground mining aggravate the difficulties of labour supply in the plantations and mines in India. But that the difficulty has been largely solved is indicated by the fact that the plantations employed as many as 1,907,126 persons in India in 1931. Besides, there was a steady flow of plantation labour to Ceylon and Malaya. From the employment of labour under indenture or the system of penal contract and of private arrest by planters, acquiesced in by the illiterate and gullible rural folks—who are apt to be deceived by the rosy pictures given to them by the itinerant arkattis or professional recruiters—to the free movement of coolies to Assam without being recruited has been a great advance. Assam recruits the largest number of tea garden coolies in India. In 1941-42, 1,155,147 coolies lived on the tea gardens in Assam, of whom a little over half were actual workers. The coolies come usually from Chota Nagpur, the C.P., the U.P. and the Northern Circars. Criminal penalties for desertion and other forms of breach of labour contract were abolished for the gardens of Assam in 1926, and for plantations in the tea districts of Madras in 1929. The Tea Districts Emigrant Labour Act of 1932, that superseded the last of the Assam Emigration Acts which provided for contract labour now permits free influx of coolies to Assam who do not require any material assistance for their journey; those who want some aid are recruited and forwarded according to methods which are left to the discretion of the employers, subject to regulation and supervision by the Local Government concerned. Anybody can now recruit a coolie. But after recruitment the coolies must be brought to authorized depots whence licensed forwarding agents, after satisfying themselves that no children or married women are proceeding to Assam without the consent of their guardians or husbands (Section 32 of the Tea Districts Emigrant Labour Act) forward them to Assam by prescribed routes on which arrangements have been made for their rest, feeding and medical treatment. It is an offence to send or recruit in

contravention of the above procedure. In 1940-41 the number who were recruited except under the sardari system was 227 souls. This means that they appeared before the forwarding depots of their own accord. In the year ending on 30th September 1941, 22 cases were reported to the Magistrates by the local forwarding agents for prosecution of the sardars for illegal recruitment. Coolies who have entered Assam as assisted emigrants are repatriated with their families at the expense of the employers. This minimizes the dangers of recruitment from distant centres. In most cases, sardars still obtain the coolies for the plantations. Uneconomic holdings drive them from their villages, especially young men and their wives, who cannot be maintained by the family plots without excessive fragmentation. The amount of advance varies according to the length of the journey, while two blankets and a sari and a dhoti are usually given. About Rs. 83 per adult or Rs. 65 per 'soul', including both adults and children, represented the average expenditure for the recruitment of an adult worker from Chota Nagpur in 1942. On an average each sardar recruited 7.1 adults. Visiting the Argora Emigration Depot, near Ranchi in Chota Nagpur, the present writer saw crowds of small tenants and landless labourers waiting for the long journey to the tea gardens in the Brahmaputra valley. In the lean months of July and August when the villagers have to fall back for subsistence upon maize, mahua and sal fruits and agricultural wages fall to 2 to 3 as. in Chota Nagpur, recruitment becomes very busy. In 1940, out of 23,758 assisted emigrants and their families recruited for the gardens in Assam, 12,210 emigrants and families were recruited from Chota Nagpur alone, the depots for recruitment being Ranchi, Palamau and Chaibassa. The sardari system is also in vogue for the recruitment of labour for the tea gardens of the Dooars in Bengal. For South India it is the kanganis and maistries who advance money to intending recruits and pay the expenses of workers and their families to the plantations. In all such cases, the money is recovered out of earnings during the period of their employment in the gardens. South Indian garden coolies are migratory, going back annually to their villages, which are not far distant, for one to three months. "The

coolies in Assam, and especially in the Bengal Dooars, Darjeeling and the Terai have begun to settle in the estates; especially in the Dooars where 90 per cent of the garden population is permanently resident. Small plots of land are given to the coolies for cultivation, and it is one of their great ambitions to become independent farmers like their compeers whom they have left behind in their villages. Thus the coolies are petty farmers, herders and workers on the estates at the same time. Many coolies, acclimatized in the jungle of Assam at the cost of the planters, have purchased lands from the Government of Assam where land reclamation and colonization have been afoot for decades. The net loss of labour of the Assam plantations from this cause has been estimated at about 7 per cent of the total labour force. Seasonal absenteeism is not less marked. In the Assam tea gardens the daily average labour strength, as compared with the total number of labourers on the books for 1933-36, shows that absenteeism was 23 per cent in the case of men, 29 per cent in the case of women and 30 per cent in the case of children, or 26.6 per cent in the case of all labour combined. Five years later, in 1940-41, the absenteeism was reduced to 21 per cent for men, 27 per cent for women and 26.5 per cent for children.¹

Abuses Connected with Recruitment

Various kinds of abuses crop up in connexion with recruitment of garden labour from distant places. The planters advance money to the intermediaries who withhold a part of it and give a smaller amount to the recruited coolies. Married couples are preferred, and now by law may only be assisted to emigrate to the gardens, but the sardar brings any man and woman to the garden who may not be really a husband and wife. Unmarried girls or unattached women are sometimes decoyed by false allurements, while even the use of liquor or drugs for enticement of coolies is not unknown. The penal sanction contract has been abolished, but as a rule the coolies, who are illiterate, cannot distinguish between the old agreement and the new, and are still under the impression that they are

1. Annual Report of the Working of the Tea Districts Emigrant Labour Act, 1935-36, and 1940-41.

not free to leave the estates. In many gardens the bonus, usually Rs. 12 for a coolie and Rs. 8 for his wife, which was paid formerly when they entered into the labour contract still continues to be paid, and in the gardens is still described as 'girmit' or contract money. The payment of the girmit strengthens the notion among the coolies that they have no liberty to leave the garden. The chowkidar's visit to each coolie hut every night also corroborates this belief. Where the law is not known, nor understood, nor can be made operative as in distant jungles, and where outsiders are rigidly excluded, the forcible illegal capture of absconding coolies and corporal punishment and the practice of obtaining contracts from minors are still met with. Repatriation of coolies whose health is undermined, who cannot earn a living wage or who find the working conditions too irksome is delayed, in spite of the law, up to the normal term of three years. The Controller of Emigrant Labour, no doubt, exercises supervision over the methods of recruitment. But the very small number of prosecutions due to infringement of the law seems to indicate that control is slack. Nor can the sardari system of recruitment cope successfully with the demand for labour in the estates under present conditions. In order to keep within the limits of the law, planters increased the number of sardars. It was estimated that on an average 7 per cent of the total number of adult workers in the plantations were appointed garden sardars, half of whom could not bring any fresh recruits while about one-third of them did not return to the estates. This has indirectly pushed up the average cost of recruitment. This average cost of recruitment, including the cost of repatriation, which varies with the number repatriated, is now Rs. 57-1-1 per adult. It is expected that free recruitment would reduce considerably the cost of recruitment, but the sardari system cannot disappear so long as the present unhealthy conditions of garden life persist.

The working conditions, the wage rates, the housing accommodation and the amenities of life available in the estates largely govern their attractiveness. Many gardens do not offer rights of way and access, and thus the suspicions that the climate is unwholesome, wages low, and the treatment of over-

seers inhuman are not allayed. In 1940 the total number of assisted emigrants and their families was 23,758 'souls', and 16,259 adults. The number of non-assisted emigrants and their families was only 4,318 'souls' and 3,439 adults.¹ 7,058 assisted emigrants together with 5,240 members of their families executed agreements under the rules, extending their terms, as they wished to stay and work in the gardens for further periods, after the expiry of their original terms of three years.

Feasibility of Establishment of Garden Labour Exchange

With improvement of garden conditions, accessibility and publicity, the system of free recruitment, aided by the facility of repatriation at the expense of the employers introduced by the Tea Districts Emigrant Labour Act, will gradually supersede the sardari system. Meanwhile, with the co-operation of the planters and Government a Garden Labour Exchange may be established at such centres as Gauhati, Sylhet and Jalpaiguri, which will complete the transformation from the unregulated importation of semi-slave labour to controlled movement of free coolies to and from the gardens. Penal contracts and restraints on the movements of workers were formerly imposed because of the cost of recruiting them to an inaccessible and unhealthy region from which their return was not expected; the present schemes of assistance and repatriation are also devised to engender a sense of security in the recruiting areas, where the garden sardars are regularly sent down to sponsor new recruits. Without these artificial aids the planters fear that there will be a chronic shortage of labour in the estates of Assam. Chota Nagpur aborigines as they go to Jharia, Calcutta, or any other industrial centre do not know exactly their routes or destinations. If other industries no longer adopt expensive and cumbersome methods of recruitment, the tea industry which has now lived down its former disrepute will have to depend upon free recruitment abolishing all special restriction on the agencies for obtaining recruits. With the gradual increase of the proportion of coolies who will not require any assistance for their journey or otherwise and

1. Annual Reports on the Working of the Tea Districts Emigrant Labour Act for the year ending September 1940.

proceed to Assam without being recruited, the gardens like all other industrial establishments will have to place reliance on the wages, working and housing conditions, sanitation and amenities of life they provide, to maintain a steady flow of their labour force. Any other scheme for securing the flow of immigrant labour, whatever might be the cost to the planters and whatever the measure of control exercised by the Controller of Emigrant Labour over the present methods of recruiting and forwarding, will be incompatible with modern industrial conscience.

Variety of Methods of Recruiting Colliery Labour

In considering methods of recruitment of mining workers, we would confine ourselves to those adopted in the Bengal and Bihar coal-fields, with which we are familiar and which together produce nearly 90 per cent of the total coal output in India. Coal-mining is by this time an old and established industry in this region, and on the whole the need of organized recruiting resorted to in the past has greatly diminished in recent years. On the other hand, the phenomenal increase of coal output and the expansion of the industry during the last depression have now caused an increase in the demand for labour, especially underground labour. A permanent labour force is growing in the coal-fields but it is not yet considerable, while the withdrawal of women from underground work has recently led to greater instability of the labour force. There is a chronic shortage of labour, especially in the marriage season (April and May), the paddy plantation season (July and August), and during harvesting (November), when buses run from the coal-fields to bring miners from the neighbouring villages, and there is a good deal of poaching by one company on another's labour force. Such scramble for labour is not true of some of the larger mines which provide housing for the miners and where better wages and working conditions have contributed to reduce the turn-over materially. In consequence such mines do not find it necessary to spend directly or indirectly substantial sums in recruiting. A number of mines recruit through their own salaried jamadars, chaprasis and labour sardars. But most collieries recruit mining wor-

kers through contractors. Such contractors are of two classes: (a) those who only supply labour which is then employed and paid by the management; and (b) those who are not only in charge of recruitment but also employ the labour force in raising coal out of pits or quarries and loading it into the wagons. The latter are called 'raising contractors' in Bihar, who are substantial persons and sometimes have zamindaris on which tenants are settled on the condition that they would work in the mines. But a number of collieries allot agricultural holdings to their miners in order to stabilize labour. Applications for such plots are renewed annually, and a nominal rent is charged, of say 9 pies per cottah per year as in the case of the Loyabad colliery. Some collieries, again, let out lands at nominal rents to the raising contractor who in turn allots holdings to his labour force.

The Importance of the Sardar

In all recruitment, however, the sardar is found indispensable. It is he who visits the villages of miners and loaders, offers advances to them and brings them to the colliery, maintaining an adequate labour force from day to day. It is he who keeps the labour in village and family gangs, which adds to the amenities of their toil in an uncongenial environment. He is a man of higher intelligence and ability than ordinary miners. He keeps watch over them, sees that they go to the pits regularly and reports if they do not obtain proper facilities for work, i.e. suitable working faces and all adequate supply of tubs. He is also responsible for all tools and plant issued to miners and loaders, keeps them under discipline at their work, and also remains present when the payment is made to them. He acts in fact as the middleman between the management or the raising contractors and the miners, obtaining commission which is usually 1 anna per tub or 2 as. per ton of coal raised by each miner recruited by him. The sardar is also paid on a weekly or monthly basis by the management according to the number of miners he recruits and the number of tubs of coal they cut and load. It is through sardars that a colliery manager or a raising contractor also advances money to miners. As a matter of fact, the raising contractor has to advance con-

siderable sums to the miners to help them over difficult times. The sardar stands as surety, but in many cases the debts cannot be recovered. The raising contractor's rates vary according to area and the conditions in the mines. Rates are found as high as Re. 1-8 per ton at Sikra, Re. 1-4-6 per ton at Jamadoba, Re. 1-4 per ton at Giridih Railway collieries and as low as 7 as. 9 pies per ton at Argada. At the Bokaro quarry the raising contractor gets 7 as. 3 pies for each ton of coal loaded into wagons, out of which he pays to the sardar 3 pies per ton. But gradually an increasing proportion of miners is not only coming to the coal-fields without the mediation or assistance of recruiting agents but is actually moving from one mine to another wherever wages and working conditions are more favourable. Workers from the U. P. and the C. P. also often come of their own accord, and in those collieries where facilities of housing accommodation are available they stay on the collieries for longer periods without return to their villages.

Absenteeism in the Coal Mines

There is no doubt that an increasing proportion of the labour force is tending to settle down permanently in the collieries. But the relevant facts and figures are hard to obtain. TABLE II on p. 26 would show, however, the proportions of the permanent, and migratory labour force, and of the number of miners' working days in a week in some of the chief collieries in the Jharia field.

From this table the average turn-over in Jharia collieries comes to 44.32 per cent.¹ Sarkari management as well as provision of housing accommodation chiefly tends to stabilize the labour force. Labour under raising contractors is more floating unless there is adequate arrangement for housing. This is chiefly because the contractor recruits and keeps a large labour surplus, a considerable portion of which is unemployed, in order to cope with sudden pressure of underground and

1. For a few other important collieries information is available only in respect of the miners' working days per week. This is given below:

1. Lodna	4.5	5. Bokaro	5.3
2. Kargali	4.5	6. Kurhurbaree	4.0
3. Argada	5.0	7. Serampur	3.6
4. Jarangdih	4.0	8. Giridih	4.0
		Total	34.9

Table II

Name of colliery	Average No. of miners working days in the week	Total labour force	Permanently settled labour	Migratory labour
Loyabad coke plant	..	470	470	..
			(All perma- nently settled)	
Katras	4.0	1,590	1,070	520
Loyabad	4.25	2,347	440	1,907
Badrichak	4.5	851	105	746
Mudidih	5.0	1,442	530	912
Bhulan Bararee	5.5	1,250	750	500
Standard	5.0	1,449	1,100	399
Sendra	4.5	940	219	721
Jamadoba	4.5	3,070	2,825	245
Digwardih	4.5	724	464	260
Malkera Choitodih	4.5	2,120	1,569	551
Sijua	4.5	2,273	1,682	591
Bararee	5.5	2,424	817	1,607
Bulliarree Kendkwadih	5.0	1,521	498	1,023
Total	61.25	22,521	12,539	9,982

loading work, depending largely on the spasmodic supply of railway wagons to the colliery. The following observation in respect of the character of the labour force in the Bokaro quarry will be of interest. Here the recruitment is through the raising contractor. It is estimated that 50 per cent of the workers here spend half the year working in the colliery, and in the other half of the year are engaged in agricultural pursuits in their native districts. These workers are relieved by men from their own villages who likewise work on the colliery and at agriculture during the alternate six months of the year. Another 25 per cent of the labour force is recruited by the contractor from the local agricultural labourers who work in the colliery when there is no cultivation or harvesting. They attend irregularly throughout the year. The remainder (25 per cent) of the labour force may be regarded as floating.¹

1. Report of the Bihar Labour Enquiry Committee, Vol. III, Part B, p. 202.

On an average, it appears from the above table, the miner works for 3.94 or about 4 days in the week. Both the Indian Mining Federation, Calcutta, and the Indian Colliery Owners' Association also agree in their estimate that the miners on an average work not more than four days in a week. In 1937 the Chief Inspector of Mines selected a certain day in February for ascertaining the actual attendance as compared with the total number of workers on the registers in all coal mines. The absenteeism for the Jharia and Raneegunge coal mines was found to be 3.3 and 8.8 per cent respectively, and that for all other coal mines, 8.5 per cent. The reason for low absenteeism in Jharia was the larger proportion of the labour force resident at or near the mines than in the other areas.¹ It should be noted that in February labour attendance in the mines is more satisfactory than usual.

Its Causes and Consequences

The high turn-over and irregularity of working are due to a variety of circumstances of which the chief are that the miners yet belong to an agricultural class and have to spend several weeks for the seasonal agricultural operations, while the hours spent underground, wages and working conditions are such as would make it unreasonable to expect greater regularity of attendance on the part of the workers drawn from the fields. Drink of course is another factor contributing to irregularity of working. But just as it means loss of efficiency of the miner, it also enables him to overcome his physical exhaustion and misery. Between 1929 and 1935 the expenditure on drink and drugs of the workers in Jharia increased from Rs. 70,000 to Rs. 1,20,000. Workers in this period actually diminished by 5,000, while their earnings were reduced by about half due to the depression in the coal industry. Prohibition was recently introduced in Jharia though it has been withdrawn during the war. It must be pointed out here that, due to the irregular supply of tubs and other defects connected with the traffic and working conditions underground, if a miner works six days in the week, he would exceed the legal weekly

1. Annual Report of the Chief Inspector of Mines in India, 1926 pp. 2-3.

limit of hours of work. Seasonal and weekly absences of mining workers accordingly are in some measure unavoidable, making recruitment a serious problem in the coal industry, especially in the busy agricultural seasons. As the present economic and working conditions continue in the coal-fields, the older methods of recruitment cannot be outgrown, and the cost of recruitment which is estimated at 4 to 6 as. per ton of coal raised will continue to be a drag on the coal industry and an impediment to improvement of wages and of conditions of labour in the mines generally. On the other hand, the permanence of the mining labour force in the collieries, without which the efficiency of the miners cannot increase, depends largely on the latter. The movement of coal from the pit-mouths to the consuming centres is not at all regular due to the haphazard supply of railway wagons to the mines throughout the coal region. Thus there is alternation of idleness and feverish employment of extra hands both underground and on the surface, causing a large mining force to be kept in reserve especially in the mines worked under the contract system. An idle labour force clamouring for employment brings down wages, standards of living and efficiency. Thus the coal industry is now caught in a vicious circle.

The sardar, as we have seen, is not merely a recruiting agent; he is also a petty contractor. He is the employer of his gang of miners and loaders whom he has recruited from his village. It is he who looks after the distribution of tubs and draws the supply of explosives for their use. Similarly the raising contractor, as the name implies, is both a recruiter and employer of labour, and under him works a band of miners' sardars, overseers of the miners and loaders. The chief reason why the contract system has entrenched itself in the mines, is that production is facilitated and supervision improves, if all the links in the chain between the coal-cutter and the wagon-loader on the surface are paid on the basis of output for which the management does not wish to assume responsibility. We have discussed in a later chapter the need and prospects of superseding contract labour by sarkari in the mines. Here we are concerned with the role and drawbacks of the commission agent, the raising contractor and the sardar as recruiting agen-

cies in the coal-fields. The cost of recruitment is now pretty high, about 4 as. per ton in Jharia and 6 as. per ton in Raneegunge—about 20 to 25 per cent of the raising cost; yet with all this costly machinery of recruitment there are spells of sudden shortage of labour when collieries have to be feverishly busy in sending out agents and emissaries of all kinds to the recruiting areas, while there are other periods when there is a considerable labour surplus waiting for employment. Both raising contractors and sardars are interested in extending their patronage to as many miners and loaders as possible, with the result that they can secure only 2 or 3 days' employment per week in the busy season. When there is shortage of labour in the collieries, migratory labour is known to take advantage of the general demand by taking khoraki and advances from more than one colliery at the same time, and doing little work since they can subsist on such advances. On the other hand, as the tide turns, a large mass of floating labour waits at the pit mouth for employment, forces the sardar and the raising contractor to obtain admittance for them into the working faces, thus reducing the weekly hours and the average earnings of the settled labour force.

Plan of a Mining Labour Exchange

It is evident that recruitment by individual collieries cannot grapple with the alternation of periodical shortage and overplus of labour as well as the co-existence of the surplus of labour in one colliery with scarcity of labour in another. Nor can the high turn-over of 44.32 per cent be reduced without the concerted efforts of the collieries on the one hand and labour unions on the other. Labour unions in the coal-fields are, however, at present markedly weak and disunited. Thus a Labour Exchange conducted by the Government with the co-operation of the collieries and the labour unions at Jharia, Asansol, Raneegunge, and Bokaro will be helpful in regulating the supply and demand of colliery labour. The offices or branches of the Labour Exchange may be located as near the bigger collieries as possible to prevent waste of time in getting miners from the Exchange to the collieries. The average daily attendance of mining workers in the Jharia field alone is now

73,000. Those who are unemployed will be at least 27,000. The total labour force in the area cannot be less than 100,000. In very few industrial centres is the employment of such a big labour force so chaotic. The Labour Exchange will serve as the link between the mining worker who seeks employment and the colliery which requires labour. It will smooth out the seasonal fluctuations of employment in the collieries, which are connected with agriculture. If all migratory workers get themselves registered for employment in the Labour Exchange, the collieries will find that they need not resort to their own costly recruitment methods. On the other hand, the collieries have to agree not to employ new hands, outside their settled labour force, except through the Labour Exchange. State funds will have to initiate the Exchange, but as the Exchange becomes successful in recruiting village mining labour or settled labour on the coal-fields, the collieries which will be gradually relieved of their own effort and cost of recruitment should contribute a quota towards the expenditure of the Exchange according to the number of miners and loaders supplied by the latter. There is a large variety of types of skilled and unskilled labour employed in the coal-fields, and the working conditions in the different mines, mechanized or unmechanized, big or small, are so different that employment will be available for most of them, provided there is intimate co-operation between the collieries and the Labour Exchange. By pooling labour supply the Exchange will secure the most economical distribution of labour and considerably reduce the present aimless wandering from colliery to colliery of the mining workers, especially of the women who now find it so difficult to obtain work on the mine surface. Due to the chronic agricultural idleness and semi-idleness in the aboriginal villages and the ignorance of the village mining workers, bribery, corruption and exploitation are rife in the existing systems of recruitment. The coal industry also is severely handicapped by the seasonal shortage of the labour force, due to its employment in agriculture. The Labour Exchange will eliminate the evils of bribery and corruption in recruitment, contribute towards the increase of industrial efficiency by the selection of better types of labour, and considerably reduce the evils of the alternation of *

shortage and overplus of labour by facilitating the adjustment of the supply and demand of labour over the extensive mining region.

Recruitment of Quarry Workers and its Abuses

A reference should be made here to the methods of recruitment of quarry workers, stone-breakers, road-menders, and road builders—those toiling, forgotten and yet indispensable workers who occupy the lowest rungs in the ladder of industrial labour. The quarrying of stone, including slate and limestone, is widely distributed over India, employs at least 30,000 persons in those quarries which come under the Mines Act. Stone quarries are usually situated in the jungles and hill sides and difficult of access. The present system of recruitment is that overseers, labour contractors and others journey to distant recruiting areas such as Rewa, Jaipur, Saharanpur, Pattabgarh, and other centres, and bring recruits, paying their fares and making some advances to their families, which vary from Rs. 25 to Rs 100. As long these advances are not repaid, the workers cannot return home. Boys and girls under 16 years of age are also assisted to migrate for this hard work which is often undertaken under the sky in all kinds of weather. No arrangements are made by contractors for housing, sanitation and health. There are written or oral agreements according to which the stone-cutters or road-builders bind themselves for a term extending up to 5 years. In one of the quarries the present writer visited, it was found that due to the reduction of the contractor's quota of work the quarry men were idle from one to two months. They were running into debt or were starving, and yet the contractor would not let them go because his advances had not yet been repaid. The entire colony was showing open rebellion in that distant jungle, but no aid nor compromise was forthcoming. It is necessary that with reference to quarry labour there should be some special restrictions on the agencies for obtaining recruits, as in the Assam Labour and Emigration Acts. Recruiting should be permitted only in certified recruiting areas. Emigration depots, under the control of the Provincial Government, should be instituted, to which the workers must be brought before

they can be forwarded to their places of work, and there should be supervision of the methods and conditions of recruitment by local officers in the recruiting areas. The labour contract should be standardized and approved by the Provincial Government. Only a licensed contractor should be permitted to advance money to a quarry worker or assist him otherwise to migrate to a distant area, while every worker should have the right of repatriation on the expiry of three years whether his debt has been repaid or not. No child, i.e. person under 14 years of age, may be assisted to proceed to work on a quarry. This subject has been treated in connexion with the regulation of contract labour in another chapter. But the question of the regulation of recruitment of quarry labour is equally, if not more, urgent. For mines, plantations and quarries the employer has to go the longest distances. But while in the case of mines and plantations, the localization and expansion of the industry gradually sets in motion a great stream of migration from the recruiting areas, quarries, especially slate and limestone quarries, are exhausted before long, and hence the quarry labour is composed of fluctuating and nomadic gangs, also the least skilled among the labour force. The protection of this class of workers has been long overdue.

CHAPTER III

METHODS OF RECRUITMENT IN FACTORY INDUSTRIES

Recruitment by the Contractor in Organized and Seasonal Industries

One might expect that outside the plantations, mines and quarries for which the labour force has to be recruited from distant areas, methods of recruitment will greatly improve for the seasonal and organized industries, where employers can obtain the workers they require right at their own factor gates. But such is the hold of contractors, maistryars and petty jobbers on the employment of labour in the country that even in the case of agricultural industries in the villages, such as

sugar manufacture, rice milling, cotton ginning and pressing and jute pressing, we do not find the employer assuming direct responsibility for the engagement of his own workers. A large supply of labour is available in the rural areas, yet it is not the employer but the contractor or overseer who in the sugar industry employs all the labour for the unloading of sugar-cane as the bullock carts bring it to the factory, and for the bagging and loading of sugar. In the rice mills it is only the village women who are recruited and employed directly by the management. Most of the male labourers engaged in weighing, bagging, etc., and the skilled labourers employed on the machine processes are recruited through contractors or masters, and are even found migrating from mill to mill with them. Similarly in the jute presses in Bengal the labourers are employed from the locality by the contractor who often gives small advances to them; while the skilled workers are recruited by the sardars under the employ of contractors who bring them from distant centres. In the Calcutta jute presses a curious system has evolved due to the employer leaving the duty of engagement or employment of workers to intermediaries. There are three categories of workers in the same mill which may claim a different employer; and which moreover, are paid on a different system—the carriers in the employ of the labour contractor, the assorters in the employ of balers and the press-hands in the employ of the press-house owner.¹ In the cotton ginning and pressing factories local labour is chiefly employed directly by the owner or the lessee of the ginneries. But in the Punjab, it is the labour contractor who takes on workers by the day. Both contractors and workers move from ginnery to ginnery and from press to press.

In some of the best organized industries in the country, such as the cotton and jute factories, engineering and metal works, contractors recruit and engage workers to an extent unknown in any other country, although the management can easily secure labour at the factory gates in the industrial centres. Apart from temporary construction work or erection of plant and machinery, where contract labour may be suitably and economically employed, many normal industrial operations are now left to contractors who work within the factory.

1. Report of the Royal Commission on Labour. pp. 77-79

premises virtually as subordinate employers. Loading and unloading of materials, carrying coal to furnaces and boilers and raw materials to different shops, are usually undertaken in all kinds of industrial undertakings by the contractor who recruits labour accordingly, and this often on a much lower rate than labour under the employ of the management. Even in the mechanical or electrical repair-shop, box-making, packing and bagging, sometimes in the starting of new shops or departments, contractors, especially jobbers, engage and employ workers inside the factory, the management to that extent divesting itself of its responsibilities to the labour force. Spare labour employed in place of absentees is also sometimes supplied by the contractor or jobber, the two kinds of labour working at different wage rates before the same machinery.

The Jobber as the Recruiter

The Royal Commission on Labour observe: "The jobber, who is known in different names such as sardar, mukaddam, or maistry, is almost ubiquitous in the Indian factory system and usually combines in one person a formidable series of functions."¹ He is the mechanic, the fitter and the overseer, but it is he who is the *de facto* recruiter, and largely exercises in practice the powers of dismissal, punishment and grant of leave to the workers. In Bombay, Ahmedabad, Cawnpore, Nagpur and elsewhere, it is the system of recruitment by jobbers which has given rise to serious evils of bribery, corruption and favouritism which call for immediate remedy. The jobber usually obtains a lump sum for securing a job and sometimes even a fraction of the worker's earnings month by month, or a regular payment in kind. When substitutes are employed, it is the jobber who fills up the vacancy, and manages to extort a lump sum on the occasion. The Ahmedabad Textile Labour Association has commented thus on the need of complete dissociation of jobbers from recruitment: 'Under the present system the power of recruitment, dismissal and promotion has been left in practice entirely into the hands of head jobbers and mukaddams whose calibre, status, education and competency for such a responsible task cannot be considered adequate for the pur-

1. Report of the Royal Commission on Labour, p. 23.

pose. It would not be out of place to state here in this connection that whereas hundreds of efficient and competent workers are roaming about in the city for want of employment, a large number of fresh and incompetent workers are seen working in the mills on jobs for which they have no qualifications except their willingness to pay a price for that job to the jobbers. The eagerness of the jobber to make money in this way is no less responsible for unjust dismissals resulting in a very large turnover. The jobber must create vacancies in order to fill his pockets through fresh recruits. All attempts to stop this corruption are entirely doomed to failure in the absence of Labour Exchanges. The present unregulated system of recruitment through jobbers is to a certain extent responsible for creating a floating population of the unemployed drawn into industrial cities from villages in a large number of cases by the unscrupulous agents of the jobbers.¹

The Millowners' Association also recognizes these evils and has taken steps to reduce the power of the jobber and to punish head jobbers for corruption and bribery. Such measures have, however, not been successful, and the jobber still continues to be the main instrument of labour management in the Bombay Presidency. In Cawnpore the maistry system of recruitment has been characterized as baneful by a responsible and experienced witness before the Cawnpore Labour Enquiry Committee. But the Northern India Employers' Association while admitting the prevalence of bribery and corruption in connexion with recruitment, takes the view that they cannot, nor can they be expected to, eradicate a system which appears to be the accepted idea of obtaining, or continuing in, employment.² Yet the Association established a Labour Bureau or Employment Exchange in Cawnpore in 1938. All unemployed workers are registered and are given admittance cards with instructions to attend at the Exchange daily in the mornings. Registration is effected according to industries and occupations. The majority of the members of the Association draw their entire labour requirements through this Exchange, except

1. Replies to the Questionnaire of the Textile Labour Enquiry Committee submitted by the Textile Labour Association, Ahmedabad, pp. 48-49.

2. Report of the Cawnpore Labour Enquiry Committee, p. 57.

in cases where old workers who had left a factory for some reason or other return to the same factory for employment. In 1940-41, 14,772 unemployed workers were registered at the Exchange, and employment was found for 7,803 workers or 53 per cent of the roll. It appears, however, that bribery has not been eliminated and that there is discrimination in finding employment against unionized workers. Employers themselves often as a matter of fact recruit at the factory gates sending information to the Exchange which thus cannot develop as the exclusive agency of employment.

Decasualization of Badli Labour in Bombay and the C.P.

In Bombay city the Millowners' Association, Bombay, has introduced what is called the badli control system with the object of decasualization of badli labour and this system has been adopted by all member mills in Bombay and Sholapur and also by the Empress Mills at Nagpur. Badlis or substitutes are given cards in order to enable them to present themselves at the factory gate every day for employment. Badlis fill temporary vacancies according to their seniority, no workers being recruited as long as badlis holding cards are available. The number of badli-card holders varies from 17,000 to 20,000 in Bombay. It has been found, however, that though the badli control system has gradually curtailed the powers of jobbers to employ labour, it has not succeeded in entirely dissociating him from this function. For he still obtains illegal gratification from badlis seeking jobs; while raw recruits coming from the villages who happen to be relations or favourites are preferred to senior badlis who have been seeking permanent employment for a year or even two years. In the Elgin Mills at Cawnpore, a similar system has been introduced. Substitutes are given brass discs, and present themselves at the mill gate every day, and their attendance is recorded. When a permanent vacancy occurs, it is filled with a substitute with the longest service as far as possible. The selection is made directly by the manager of the department concerned, and thus the system has largely reduced the opportunity of the master to obtain illegal gratification from workers seeking employment. The latter has now his chance only during the

workers' preliminary enrolment in the waiting list of the mill.

The badli control system adopted in Bombay or the method of selection of workers on the basis of written application and the waiting list by the management itself meets the evils of the present method of recruitment half-way. For the worker has in any case to present himself at the gate of the particular mill which has issued the cards or where his name is entered on the waiting list every day until there is some vacancy. Meanwhile there may be vacancies in other mills. Thus there is needless waste of time of the workers, while each industrial establishment has to maintain a larger body of surplus labour than is actually required. An organization which can pool the labour supply and at the same time is in direct contact with all the industrial establishments at the centre can effect the most economical distribution of labour and considerably reduce the waiting from mill to mill of men seeking employment. This is the real object of the Labour Exchange. But before we consider the feasibility of its establishment in the chief industrial centres of India, we shall briefly consider the methods of recruitment and employment in the jute mills of Bengal and in engineering works like the Tata establishment at Jamshedpur.

Relation between Corruption and High Turn-over

The jute mills are largely managed by Europeans who do not know the languages of the workers, and are mostly ignorant of their social and economic backgrounds. Thus they are completely dominated by the array of intermediaries—the departmental head, the Babu or personal clerk and assistant, the head sardar, and the line sardar. The jute mill operatives have to satisfy these grades of intermediaries, though of course the head jobber gets the lion's share of the bribe. The jobbers earn wages from Rs. 28 to Rs. 140 per month, but their actual earnings vary from Rs. 60 to Rs. 250 per month. There is no other industry in India where the jobber exercises such powers over the engagement, dismissal and promotion of operatives. For engagement, he obtains his customary bakshish of Rs. 4 to 6, which is repeated if the worker is re-employed in the same mill after a period of absence. Even for an absence of

a month or so on account of pregnancy the women operatives have to pay him Rs. 4 in order to get back to their jobs. For promotions he extorts also a lump sum; while he obtains a regular payment of 2 to 4 as. every week as commission out of each worker's earnings of Rs. 5 to 7 a week. For higher earnings of the operatives, the head jobber's quota increases proportionately. Finally, there is hardly any selection of the workers according to ability or experience of work in the mill. If he happens to be a relation of the head sardar or can give him the largest commission he is bound to be employed; and all the industrial training he obtains is at the cost of the jute mill. Such is the head jobber's hold upon the body of workers that if he be dismissed, he withdraws from the mill quite a number of workers, and can even foment successful small, departmental strikes. In one of the jute mills such was the power of the head jobber that a few years back during a trial of strength between him and the management, he caused a successful strike of the entire body of mill operatives, whereupon the management considered it worth while to send him out on a pilgrimage to Mecca by giving him passage money with an additional bonus of Rs. 2,000. No doubt such bribery, favouritism and inefficiency cannot be weeded out except through the establishment of Labour Exchanges. Recently, the badli rotational system of employment has been introduced into some jute mills in Bengal. About 37 mills have their Labour Bureaus while the history card system is adopted by 65 mills. There is a full record of the badliwalla's engagement and quality of work according to which he may obtain priority in case of a permanent vacancy. With the folder record system obtaining in the jute mills the opportunity for bribery and favouritism is accordingly reduced. Sometimes, as at Birlapur, the recruitment is in the hands of the time-keeper's establishment, which maintains records of badli workers for whom employment is given in rotation so that they might work and earn at least two days in the week to be eligible for obtaining ration cards. Such arrangements no doubt eliminate in some measure the abuses of the sardari recruitment which has, however, to be resorted to due to chronic labour shortage. Thus the Sardar dies hard.

In cotton and jute mills, engineering works and other industrial establishments bribery and corruption are universally prevalent, and these increase the rates of turn-over and absenteeism to a greater degree than what is due to the natural social circumstances of the workers. For each jobber an occasion for re-engagement is an opportunity for a fresh bribe. Badlis also swell his waiting list. The excessive turn-over among the badlis in the different establishments in India is largely due to the fact that jobbers are pecuniarily interested in extending their circle of patronage so that badli workers can obtain only a few days' employment in a month in the factory.

At the iron and steel establishment at Jamshedpur, the turn-over was very heavy at the beginning but is steadily diminishing, the chief reason being that a considerable proportion of the labour force is settling down in Jamshedpur itself.

Turn-over in Jamshedpur

1925	..	..	..	36.6
1926	..	..	..	31.3
1927				24.1
1936	..	..	..	16.5
1937	..	..	..	14.0

Effects of High Rates of Turn-over and Absenteeism

Turn-over is to be clearly distinguished from absenteeism. The former measures the change of the personnel of workers in an industrial establishment; the latter measures the extent to which the workers fail to attend to their regular work. The success of an organized industry largely depends upon the efficiency and experience of its workers and hence on the extent to which it can reduce its labour turn-over. For all cotton mills in the Bombay Presidency, the average extent of the turn-over was 28.32 per cent in the year 1937. Statistics of rates of turn-over of the various types of industrial establishments in this country are not available. But there is no doubt that this rate is very high. The Royal Commission on Labour found that in a large number of factories the fresh employees engaged each month was at least 5 per cent of the establishment, thus giving an annual turn-over of 60 per cent; in other words, in a period of less than two years, the fresh engagements

exceeded in number the total labour force.¹ Turn-over is probably the highest in India in the jute mill industry of Bengal. The turn-over in Kamarhatty jute mill, which may be taken as a representative mill is calculated at 9.96 per cent monthly or 119.6 for the year ending 1943; i.e., in less than a year the whole personnel of the mill is altogether replaced. This high rate of turn-over is largely due to the difference in wage rates for the same categories of jobs, prevailing in the jute mills in Bengal. Moreover the concentration of the jute mills in a narrow belt along the river Hooghly and the present shortage of labour in the mills, caused by various war projects that have synchronized with huge orders from the U.S.A. facilitate the movement of labour from one mill to another. Instances are not rare where a worker comes back three or four years later to the original mill having worked in half a dozen other mills. Workers are sometimes re-engaged after three or four years having once been dismissed; while those turned out of one mill are almost always welcome in others. The history of many of the fresh recruits would show that they have been employed previously in the same industry and even in the same mill. A high rate of labour turn-over implies reduced skill and efficiency on the part of the workers and diminished output for the industry. But many employers in India would prefer a constant change in the labour force if that gives them an opportunity to reduce their wages bill, although the new workers may not be able to adjust themselves at once to both machines and methods of working. From the workers' side they are not only deprived of various advantages of continued employment in one establishment such as opportunities of a graded pay, bonus, provident fund and leave, but they have even to purchase their re-engagement; while there is bound to be less solidarity among the workers who move frequently from mill to mill and from industry to industry.

Like a heavy rate of turn-over, frequent absenteeism is also a great handicap to both workers and the industry. In both textile mills and the engineering works in India, it has, however, to be conceded that the periodical absence from jobs of the workers, who are under-nourished and who labour stren-

1. Report of the Royal Commission on Labour in India, p. 26.

nuously under unfavourable working conditions, is itself a defence mechanism which prevents a complete break-down in health. Statistics of absenteeism in the factory industries of India are neither adequate nor reliable. But the following data will be of interest, subject to the consideration that the method of calculation of percentages of absenteeism and the system of employment of substitute labour in the different centres are not quite the same:

Absenteeism in Cotton Mills in Bombay, Ahmedabad, Sholapur and Nagpur in 1941 was as follows:

Bombay	..	..	9.50	per cent
Ahmedabad	..	..	4.48	"
Sholapur	..	..	12.30	"
Nagpur (Empress Mills, Day Shift only)	..	..	17.26	"

Similarly in the jute mills of Bengal the number of working days lost per month is even more than a week on an average for all workers.

Table III
Absenteeism in 45 Jute Mills in Bengal, 1929

Month	Days worked		Employed at the beginning of the period	Persons granted sick leave	Average number of working days lost
	Total	Average			
May 1929	740	20.5	184,090	6,638	7.5
June	605	18.5	183,474	6,650	7.5
July	857	23.8	185,018	6,666	8.3
August	571	15.9	184,502	5,132	8.3
September	692	19.3	182,273	5,646	7.3
October	749	20.8	182,898	5,553	8.1

For a typical jute mill, viz. Kamarhatty employing about 6,000 persons absenteeism works out at about 8 per cent for 1943. Similarly for the Bengal Jute Mill, Sibpur, Howrah, employing 2812 persons on an average in the year, the average number of absentees is shown in TABLE IV, month by month.

*Table IV**Absenteeism in a typical jute mill in Bengal, 1941*

<i>Month</i>	<i>Percentage</i>	<i>Month</i>	<i>Percentage</i>
January	3.5	July	7.0
February	7.5	August	7.2
March	3.1	September	6.7
April	4.4	October	4.3
May	6.8	November	5.1
June	12.1	December	12.8
		Yearly average	6.7

It is noteworthy that for the preparation of the fields in summer and for harvesting the winter crop in Bihar, whence the major proportion of the jute mill operatives comes, the average number of absentees is the highest in June and December. Absenteeism in the summer is also largely affected by the marriage season. Absence due to sickness exhibits some of the highest records in India in the jute mills, situated usually as these are in unplanned, congested and insanitary villages and towns. TABLE V will illustrate this:

*Table V**Percentages of absenteeism due to sickness,
Bengal Jute Mill, 1942*

January	2.4	July	6.6
February	3.5	August	10.7
March	2.8	September	9.3
April	2.3	October	6.08
May	5.1	November	7.6
June	6.3	December	4.7

Need of Labour Exchanges in India

In western countries both labour turn-over and absenteeism have been considerably reduced through the establishment of Labour Exchanges. We have already stressed that the mischiefs of the maistry or sardari system of recruitment could only be successfully combated by the establishment of a Labour Exchange in India. In Japan the textile industry suffered as in India from the evils of bribery and corruption of the

jobber, the oya bun, who used to deduct 10 to 14 per cent of wages of workers under him. This evil has been very successfully checked in Japan by the Labour Exchanges. This could be seen from the fact that in 1930-1931 the average number of general workers who applied for vacancies to the Exchanges was one million while the casual labourers numbered five million. Employers are also learning to make more use of the Exchanges; in 1930 there were notified 900,000 vacancies for general workers and 5,000,000 for casual labourers, representing a 30 to 40 per cent increase over the figures for the previous year. Over 80 per cent of the casual labourers could be always found employment and 30 per cent of the general workers. Work could be found for only 10 per cent of the non-manual workers. Such statistics indicate the popularity of the Labour Exchanges with both the employers and the workers. Workers who are placed by the Exchanges are given tickets entitling them to a 50 per cent reduction of the fare on the trains and ferry boats of the State Railways. Moreover, the Employment Exchanges are authorized to advance the workers' travelling expenses to the place of employment to which they are going. In Japan as in India, wages are usually paid to the day-labourers through their gangman, boss or contractor (or oya bun) corresponding to the Indian sardar, maistry, or thekadar. In Japan as in India, this boss deducts a commission from the wage. The evil is remedied in Japan by the Labour Exchange advancing money every month to the day labourers to protect them from the clutches of both the boss and the money-lender. In 1931 the Labour Exchanges advanced 536,377 yen to 353,333 day labourers in that country. There are now 421 Exchanges under the jurisdiction of seven local Exchange Boards; while the Central Employment Exchange Board in Tokyo supervises and controls the local Boards. Prominent representatives of the employers and workers are included in an advisory capacity to control the working of the Exchanges run by government through the Bureau of Social Affairs.¹ The Labour Exchanges in Japan are also entrusted with the important task of organizing vocational training and re-training and of transferring workers from the declining to the expanding industries. Re-

1. See "Industrial Labour in Japan" (I.L.O.), pp. 296-300.

cently the Government have taken up the management of the Exchanges; no other agency is now authorized to undertake placing work. Labour Exchanges set up and conducted by the Government in the chief industrial centres under the Ministry of Labour on lines similar to Japan should form a part of the industrial policy of each Province in India. The success of Labour Exchanges in Europe and America and recently in Japan should induce the Provincial Governments to start such organizations as early as possible. As a matter of fact, India is already committed by her acceptance of the Unemployment Convention of the I.L.O. in 1921 to start such public employment agencies.

The present chaotic state of Recruitment and Employment

Co-operation between employers and labour organizations would be necessary not merely for the creation of a machinery through which employers and workers will come into contact, and proper persons recruited for existing vacancies at the right time, but also for the evolution of an enlightened policy of management in respect of security of employment, promotion and leave. Ultimately, security of service, remuneration, and expectation of increment are the most important factors in reducing the labour turn-over in any industrial establishment. We have already referred to the policy adopted in many factories in India, of engaging fresh hands at lower wage-rates in order to reduce the cost of production, even though such replacement is in the skilled category. In most factories in India the bulk of operatives even of the skilled grades is temporary and daily-rated; while all unskilled and semi-skilled men, who are plentiful, are strictly on a temporary basis. The want of security for the great majority of workers in an industrial establishment undermines their initiative and efficiency. Even in such a highly organized industrial establishment like the Iron and Steel works at Jamshedpur, we find a considerable proportion of temporary workers. The works employ 28,674 workers, excluding those employed by contractors on behalf of the management, numbering 4,500. Of these 28,674 workers, as many as 25,294 are daily-rated and may be considered as tem-

porary hands, who do not obtain the facilities of leave given to the monthly-paid workers numbering only 3,380. The monthly-rated workers are allowed 30 days' privilege leave on full pay for every completed year of satisfactory service and 5 days' casual leave in a year; there is no casual leave for the daily-rated employees, while their privilege leave is limited to 14 days only. In the cotton mills in Bombay even the spinners' wages are fixed on monthly basis while all operatives obtain casual leave for 10 days, and privilege leave for one month also accrues for every year of service. There are, again, at Jamshedpur some 7,000 employees who are weekly-paid and these are excluded from the Departmental and General Production bonuses of the Works. Besides, it appears from the employment statistics of the Works that the proportion of casual workers is gradually on the increase. In its evidence before the Royal Commission on Labour the Company stated: 'The extent of casual employment was .03 per cent in 1927. This figure is based on the total number of temporary employment in that year to the average monthly staff on the roll.' It further stated that on a rough examination of the figures from 1st April, 1937 to 31st March, 1938, the percentage of such casual labour employed varied from 6 to 8 per cent. This increase in the proportion of casual temporary hands between 1927-1938 is very striking. These have been engaged often on reduced rates of wages and the management has profited from such substitution of temporary for permanent jobs. From the workers' side, the results have been the deterioration of the standard of living of a considerable section of the workers and creation of a large floating and unemployed semi-skilled and skilled labour force which breaks strikes, on the one hand, and is responsible for mass unrest, on the other. The situation is aggravated by the large turn-over. In a steel plant of such size, it is easy to anticipate the standard labour force employed for construction works, both mechanical and electrical, including renewals. Yet for quite a number of years about the same force is kept temporary, being discharged and re-engaged with a break. The appointment of a permanent supervisory staff for the Construction Works shows that the Company cannot have much difficulty in standardizing its

permanent labour force and reducing the number of casual workers. In this Department workers representing more than half of the personnel are employed on a temporary basis though they have been working for even 5 years. But even in a highly mechanized plant like the Bar Mill men are on temporary jobs for a number of years at wage-rates (10 as. per diem) much lower than the regular rate of Rs 2 per diem.

In all engineering and metal works in India contractors and petty jobbers play the role of intermediate employers; so that contract labour works side by side with labour under the direct employ of the management, and without the privileges of the latter. It will be the task of the Labour Exchange at each industrial centre to settle with the employers the conditions of recruitment of casual workers, so that these may be as quickly absorbed as possible into the standard labour force of the establishment. Recruitment followed by discharge and re-engagement after short intervals indicate the present chaotic state of employment. Distinction has, however, to be drawn clearly between the normal industrial operations, requiring a standard labour force and those which are irregular and intermittent, such as construction of buildings and structures, or the loading and unloading of materials, which may have to be delegated by the management to contractors and overseers employing workers on a temporary basis. But whereas in India temporary contract labour invades even the foundry and the structural shop inside the factory, it has to be admitted that the contractor generally cannot provide quality work, and on the whole departmental work obtains better output at less price, while the individual worker also obtains higher wages and better treatment.

In India it is customary that semi-skilled operatives who have acquired some skill and experience in the unskilled categories earn promotion on the recommendation of the jobber. As a matter of fact, the jobber himself was such a semi-skilled worker who has earned promotion as a fitter and an overseer. The legitimate role of the jobber in the Indian factory system would be, as in other countries, that of an overseer and a repairer of machinery rather than the recruiter. But the jobber's category is the highest to which an Indian industrial

worker can rise. All classes and categories of work in an industrial establishment above the jobber's post are now closed to the ranks of Indian workmen. This circumstance has contributed in no small measure to engender in the jobber, who has no prospects of rising higher, the temptation to abuse his present status. This is facilitated by the large difference in his earnings which rise upto about Rs. 250 per month, including his illegitimate exactions, and the average earning of the workers whom he recruits and by the absence of a Labour Exchange. The improvement of the economic position of the individual jobber would have been of greater advantage to his fellow-workers as well as to the management if his function as the recruiter were relegated to the background while he by his technical skill and experience could be promoted, as he never is, to become an overseer or a foreman. With vocational and industrial education of skilled and semi-skilled workers and the introduction of an effective scheme of apprenticeship training, it will be possible to raise skilled workers and jobbers to higher subordinate ranks in the factory which are now monopolized by the illiterate classes. The present gap between the ranks of workmen and the supervisory grades in the Indian factory system has to be abridged in order to reduce the cost of production and overhead charges on the one hand and friction between the working class and the directive class, on the other. The rise of Indian workmen to the posts of foreman and shop supervisor, and their association with works managers or employment officers will be the final steps in the complete elimination of bribery and corruption in recruitment and appointment as these will materially contribute to the increase of vigour and efficiency of industry.

CHAPTER IV

CONDITIONS OF EMPLOYMENT

Leave and Holidays with Pay

In India there is hardly any security of service, leave or promotion in the case of the majority of those workers who are employed in the mines, quarries, sugar, cotton ginning and pressing factories and in the non-regulated factories such as mica and shellac factories, tanneries, rice and oil mills. In all these cases the workers are still essentially and primarily agriculturists, and the great majority live in their village homes, returning from the factories in the evening. Slack or idle weeks in agriculture see them employed in various kinds of seasonal factories and in the mines. Of the former the sugar factories, which are all scattered over the cane area, have now multiplied fast and absorb about 200,000 workers. The wages of most workers whether in the sugar and other seasonal factories or in the mines are all rated on daily basis. The sugar factories and mines, therefore, as a rule, have not adopted any system of granting leave to workers except to the clerks and the supervising staff, who obtain leave with full pay up to three weeks in a year.

The absence of any definite rules about leave has been attributed by the employers to the intermittent nature of work in the seasonal factories. It is, however, reasonable that rules for granting leave during sickness should be adopted. As a matter of fact several sugar factories do grant half pay leave during sickness on the production of a prescription chit. The adoption of this practice by all seasonal factories is eminently desirable.

Many seasonal factories employ women, adolescents and children. In 1936, 81,285 women were employed in the seasonal factories out of a total of 308,427 workers, forming 34.7 per cent of the labour force. In the Province of Bombay 44 per cent of the labour force in the cotton ginning factories and 28 per cent in the pressing factories are women.

In the organized industries the custom is to give leave with pay only to the clerical and supervisory staff. The workers or lower-grade employees do not obtain leave with pay. Leave without pay is, however, granted to the workers in many industries in the slack season at the discretion of jobbers and masters who earn money on their re-engagement. Leave for a few festival days is given in the mines and in the factories in Bengal and Bihar. In Cawnpore and other towns in the U.P., the workers do not obtain any holidays for festivals. Similarly in the C.P., holidays are not given as a general rule. In Bombay an enquiry has shown that cotton textile mills employing about 50 per cent of the workers grant leave with pay to certain categories of their workers; while in the engineering industry, factories employing 60 per cent of the workers grant leave with pay to all their workers, while those employing 14 per cent of the labour force grant leave to certain categories of workers.

The question of granting holidays with full pay has been raised in most industrial countries of the world. Several countries have granted such holidays either by legislation or by collective agreements. The demand for such holidays is based on the following consideration. 'It is widely felt that with the increasing productivity of industry it should no longer be necessary for the workers to drudge a ceaseless round, year after year, without intermission. The movement is based on recognition of the needs of the worker as a human being, and not merely as an instrument of production.' In the tea plantations in Assam apart from Sunday, which is generally a holiday, leave is granted for the Durga Pooja, Fagua, and some other important religious festivals. In this respect practice varies in the different factories in India. Generally holidays are given to workers only in accordance with the Factory Act—which grants a weekly holiday for all workers and forbids employment of persons for more than 10 consecutive days without a holiday for one whole day. But some factories close themselves for a few festival days apart from the weekly day of rest which is Sunday. At the sugar factory

1. Report of the Director of the I.L.O., to the 25th Session of the International Labour Conference.

at Barra-Chakia in Bihar during the crushing season the shift workers get 32 consecutive hours off every 14 days, and day-workers 24 hours off per week. During the off-season the day workers get the afternoon of Saturdays and the whole of Sunday off. Over and above the periods already stated there are $7\frac{1}{2}$ festival holidays on full pay. In 1941 the Indian Jute Mills Association decided to grant 6 days' holidays with pay in the year—Durga Pooja 2 days; Mohurrum, Doljatra, Id-ul-Fitr, and Id-ul-Zuha, 1 day each. Of 5,581 perennial and 3,742 seasonal factories in the whole of India 1,837 and 740 respectively granted holidays on Sundays, while 2,836 and 2,439 respectively closed either on Sunday or another day of the week.²

Continuity of Service

Much more important than the question of leave and holidays is the question of guarantee of the continuity of service. In most of the sugar factories no list of workers is maintained and jobbers or time-keepers often take bribes at the time of their re-entry next season. It is desirable that on termination of the season every worker who has been employed throughout the season should be given a re-engagement metal token. The sugar factory at Reyam has been giving 10 per cent of the wages to all unskilled workers for the off-season and re-engages them all unless their work has been found unsatisfactory. All unskilled and semi-skilled workers in sugar factories should be re-engaged if they return at the beginning of the next season, and they should be given a remuneration of 10 per cent of their wages for the off-season, the remuneration being paid at the time of re-engagement. Only half of this should be paid when the workers cannot be re-employed due to conditions in the industry. Such practice would in some measure counteract the effects of the present disengagement of labour for a considerable period of the year.

TABLE VI shows the percentages of labour retained outside the crushing season in some factories:

. 2. "Industrial Labour in India" (I.L.O.), p. 232.

TABLE VI

Proportion of those employed in the off-season to those employed during the season

		Skilled	Unskilled
1.	South Bihar Sugar Mills, Bhita ..	37.1	13.0
2.	New Sewan Sugar & Gur Refining Co.	41.0	19.4
3.	Belsund Sugar Factory	18.4	18.0
4.	Sitapur Sugar Works	36.3	22.9
5.	Motipur Sugar Factory	19.5	5.4

It is customary to give a retaining salary outside the crushing season to some of the technical staff such as the engineers, chemists and pan-boilers. But the salaries given to engineers and chemists of all grades are much lower than their qualifications and experience deserve. Often some engineers are retained in rotation during the off-season for overhauling work, but the chemists for whom no work is available have to undergo a period of forced idleness on small pittances. The technical staff that is disengaged including engineers, chemists, pan-men and a few other workers of the skilled category should be given retaining salaries for the off-season, amounting to one-third of their remuneration and they should be treated as being on compulsory leave during the period. They should also be entitled to obtain at least their old salaries on re-engagement.

Like all other factories, sugar factories are permitted to fine for certain offences under the Payment of Wages Act but hardly any factories levy any fines. In some factories, however, it is found on inspection that fines are being imposed but these are not recorded in any fines register nor any fine funds established for utilization of such fines for the benefit of the workers.

Different practices obtain in the sugar factories regarding fines for late-comers. The common practice is: late-comers are not allowed to work for the period which has already begun, and marked half day present and paid accordingly. It is necessary that the fines for late attendance should be standardized.

Absenteeism and Irregularity of Employment in the Coal Fields

In the coal mines, the miners' and loaders' services can be terminated any time at the pleasure of the manager, contractor, or sardar. A custom has grown, however, in some mines according to which the miners obtain leave for a period of, say, 6 to 8 weeks at a time by providing substitutes who are in most cases relatives and dependents, and such leave is sanctioned by the management. There are, however, no prescribed rules on the subject. Everything also depends upon the supply and demand of labour. When labour becomes scarce, the management would naturally attempt to obtain some hold on the miners who must return to their villages, by giving them leave. On the whole, however, employment is insecure as work is intermittent, the miners moving to and fro from the villages according to the condition of the harvests. This, however, does not hold good in the case of those who are known as C.P. miners, largely hailing from the Central Provinces, who stay for longer periods on the collieries not constantly visiting their village homes. Particularly is employment insecure in the case of wagon loading labour, which is affected by shortage of coal orders and wagon supply. A large number of labourers is kept in reserve in many mines to cope with the sudden influx of wagons, and increase of coal orders. For the rest of the time, this type of labour is idle. This matter is connected with the general organization of the coal trade and control of the collieries. The subject will be discussed later in connexion with contract labour.

Regular employment is generally assured for the machinery and operating staff in the coal mines. They are generally granted leave with pay for 12 to 15 days and up to 3 weeks in the year. But when coal output is restricted this class of labour is also affected. They are all time-rate workers getting one full day's leave in each week according to mines regulations and being paid for the whole seven days. The supervising staff and officers, who are paid on a monthly basis, get full pay for the leave they are granted. Weekly workers when they fall ill or apply for leave are treated differently in different mines. In some cases the poorer weekly paid wor-

kers are helped by payment of khoraki at the discretion of the management. In the larger mines a scheme of provident fund for the superior staff, including clerks, foremen and supervisors, is found to exist.

It is apparent that as in the case of the sugar industry, so in mining, the workers' insistence upon the contact with the village and agriculture has contributed towards insecurity of employment. In the mining industry a permanent labour force is in the making. Here and there we have found miners who have never returned home in the present generation, and these are by no means all C.P. miners. It has been estimated that on an average the miner works four to five days in a week. Further, local miners work for fewer days than the recruited miners. Of the entire daily paid labour force, it is estimated hardly 10 per cent work for all the 6 days of the week, 45 per cent work for 5 days, 25 per cent for 4 days and the remainder for 1 to 3 days. Labour attendance is satisfactory from the beginning of September to the middle of October, and again from the middle of December to the middle of June. It is irregular during the rest of the year due to the needs of agriculture, as about 90 per cent of the miners are cultivators owning lands in their village homes. April and a part of May are affected owing to marriages. It ought to be pointed out here that since the women have been withdrawn from the mines, the miners keep going home every two to three weeks for just about seven to ten days' stay to visit their wives and families, as most of their women and children now remain behind in their village homes instead of coming to the mines.

Absenteeism and insecurity of employment are linked together in the mining industry. The causes of absenteeism may be indicated thus:

(1) Engagement in the fields, marriages and festivals accounting for approximately 75 per cent of withdrawals.

(2) Drunkenness and relaxation accounting for approximately 20 per cent of absence.

(3) Sickness accounting for approximately 5 per cent of absence. Malaria is a recurrent scourge during the monsoon in the coal-fields. Its incidence has rapidly increased. It is

estimated that while in 1932 the number of malaria cases was about 9,000 in the Jharia field, it increased to about 33,500 in 1937.¹

Some time back transportation by buses was introduced when there had been a shortage of labour. Since then the owners of mines have continued to bring miners by buses even though labour has been plentiful. There are reasons to believe that facilities of transport have resulted in better attendance. Buses and trains convey only an exceedingly small proportion of the labour force. Most miners walk across to the mines from villages 1 to 6 miles distant. The miner who lives farthest away takes nearly 1½ hours to reach the mine. No doubt long distance travel on foot especially during the monsoon period is contributory to absenteeism.

There is hardly any industry in the country where so much irregularity of employment is forced upon the workers by the organization of the industry itself. The wagon-loaders are the worst victims of short work. The majority of them live a hand-to-mouth existence, being unable to save anything in the period when adequate orders and supply of railway wagons give them intermittent employment. But forced under-employment holds good also of the majority of the miners and loaders, and this in its turn leads to absenteeism.

Chronic Shortage of Tubs

In the coal mines the inability of the management to adjust the number of tubs to the seasonal production and their tendency to admit more workers than can be adequately employed explain the chronic tub deficiency which brings down the daily earnings and output of coal-cutters and loaders, who are all paid piece-wages.

The following data obtained from three representative collieries will be of interest:

TABLE VII

	Mine 'A'	Mine 'B'	Mine 'C'	Number of miners and loaders		
				of Tubs	Busy season	Slack season
	400	750	450
	216	400	300
	291	475	300

1. Evidence of the East Indian Coal Company Ltd., Bararee Colliery, Evidence Volume III, Part B, Bihar Labour Enquiry Committee.

In the smaller mines which cannot afford to invest capital the deficiency of tubs is even more serious, leading to chronic under-employment and wage-cutting. The view of the management is that the miners will not work underground so long as they do not find tubs within their arms' reach. In some measure the miners are justified in adopting such attitude, since for a whole day they may not be getting any tubs at all, and may find next day that the coal which they have cut has been pilfered by the cutters and loaders of the next shift.

Only an improvement of the internal organization of the collieries can assure the adequate supply and proper movement and distribution of tubs and reduce periodical under-employment. The management should engage miners in such numbers as correspond to the number of coal-tubs in circulation. The introduction of auxiliary haulages, jigs, lines up to the working faces, and bye-passes to facilitate quick return of tubs, and employment of special staff to watch the supply of tubs to miners and their quick return to the main haulages are measures calculated to ensure to the miners sufficient and regular supply of tubs right to the working face.

Voluntary absenteeism and forced under-employment both contribute to lower the miners' earnings. As the organization of the industry improves absenteeism will no doubt be reduced and both output and earnings will be raised.

In most mines no work is done on Sundays and festival days except in the essential services, viz. pumping, ventilation and power supply. The festival holidays usually given are as follows:

Durga Puja	..	..	3 days
Kali Puja	..	..	2 days
Pitha Parab	..	..	1 day
Fagua	..	..	2 days

The majority of the employees being on piece-work basis do not earn any holidays at all.

Recently the Indian Mining Association has decided to give in all collieries affiliated to it casual leave for a week in the year with full wages to all miners and loaders who have

put in 280 days of work in the year. At present it is only the monthly and weekly paid staff who are entitled to any leave during sickness in the mines. Miners and loaders as a rule, however, obtain neither casual nor sick leave. There is also no rule of giving maternity benefit to women workers and such benefit is seldom given. At the Tata Collieries, however, women who have been in the employ of the Company for a total period of not less than 6 months prior to the date of confinement are allowed maternity leave with full pay for 8 weeks, provided they undertake not to do any work outside their own homes during those 8 weeks and the birth of the child is notified to and is certified by the Colliery Medical Officer.

Leave with Pay in the Engineering Industry

Conditions of service, including leave, promotion and discharge, are stabilized most in the engineering industries, and especially at the Tata Iron and Steel Works. Yet these leave much to be desired. The Tata Iron and Steel Company give a month's leave with pay for every year's service to its monthly rated employees, and 14 days' leave with pay in a year to its daily rated but monthly paid employees. The daily rated employees cannot accumulate leave for more than six weeks. Such limit often works hard on such workers. Further, the establishment does not give any such leave to its weekly paid employees. The contention of the management is that the weekly paid employees absent themselves too often, and that the period of absenteeism is too large to warrant grant of any further leave with wages. On the other hand, it must be conceded that in no industry is leave for recoupment and relaxation more essential than in iron and steel plants where work is often strenuous, hot and full of hazards. It is suggested that the management might fix attendance for a fixed number of days in the year, say, 250 days, as a pre-requisite for the weekly paid employees to earn a fortnight's leave in a year with pay. Such privilege should be available also for workers on piece-wage basis. It should also be open to the management to refuse to grant casual leave on any particular day when it might dislocate work.

It should be mentioned that the Indian Iron and Steel

Company at Kulti and Hirapur grant 15 days' leave with pay to all skilled and unskilled employees. Similarly the Indian Copper Corporation Works at Ghatsila grant such leave, while the Eagle Rolling Mills Ltd. at Kumardhubi grant 15 days' leave with pay and another 15 days' leave without pay at the end of one year's continuous service to all labourers. The Tin Plate Company of India, Golmuri, also permit the same kind of leave with pay to all employees, whether monthly or daily rated, as follows: 15 days' privilege leave, 5 days' sick leave and 2 days' religious festival days leave. No doubt as the weekly paid workers obtain greater stability, the discrimination between the weekly and monthly paid categories of workers will disappear and the weekly paid employees will be admitted to the same privileges as the rest of the workers. In Assam the workers in the oil mines at Digboi obtain 17 days' leave with pay per year.

The Tata Iron and Steel Company have no separate rules for granting leave during sickness to its monthly paid and monthly rated employees, for whom the privilege leave, furlough, casual leave and accident leave have been intended to cover periods of illness. For several years the employees have asked for full payment of wages for and up to a period of three months' absence due to sickness in the case of those who have been in continuous service for a year. In the case of further continued illness three months' half wages are claimed as the maximum limit. It is understood that the Indian Iron and Steel Company Ltd. grant full sick-pay to all classes of workers of one year's service and over, whether weekly paid or monthly, for the first month of illness and half-pay for the second month if the illness persists. This privilege extends to workers in the steel plant as to cutters and loaders in the iron mine at Goa. The Eagle Rolling Mills Ltd. at Kumardhubi also grant a fortnight's leave with pay for sickness which is vocational or due to injury received at work. Similarly the Indian Copper Corporation Ltd. at Ghatsila have also introduced tentatively a scheme of payment of wages during sickness. In this Company's Sickness Benefit Scheme the employees contribute a small monthly amount on the following basis:

	<i>Rate per day</i>	<i>Contribution</i>
All receiving 6 as. and less		No contribution.
" " 6 to 10 as.		2 as. per month
" " 11 as. to Re. 1		3 as. " "
" " over Re. 1		4 as. " "

In return all employees when ill receive the following benefits. For the first 3 days of illness the employees receive no benefit other than free medical attention and medicines, etc. After the first 3 days of illness the employee receives half pay for the time he is ill and until the date he is declared fit to resume his duties by the medical officer. If the employee is an in-patient in the hospital, subsistence allowance is given as an advance on sick pay if required.

With reference to holidays with pay in the engineering industry, the practice obtaining in the Tata Plant should first be mentioned. Sundays are generally holidays here for non-continuous operating factories or for the non-continuous process departments in continuous operation factories. As a result four days are lost to the workmen for earning in non-continuous operation plants as compared with two days in the case of workers in the continuous operation sections and factories. The advantage of compulsory resting of a day after a fortnight's work as prescribed by the Factory Acts is weighed less in the scale by the workmen than the earnings lost, particularly as the present scale of wages does not take into consideration the loss of earnings of two or more factory off days. On the other hand, the monthly rated employees are paid for the Sundays and off days on which they do not wholly or partly work. Thus workmen in the non-continuous operative departments harbour a just grievance that can only be removed by wage readjustment. Two days' festival leave with pay is granted to workmen at the Tata Plant, viz. the Founder's Day and the Viswakarma day. Those who are obliged to work on those days are given other days as holidays during the year in lieu of them. It should be mentioned that two denominational holidays have been recommended by a Conciliation Board, which looked into the grievances of the workers of the Indian Iron and Steel Company.

Need of Rationalization of Leave

In the cotton textile mill industry in Bombay there is no provision for leave with pay for wage earners. But the standing orders lay down that service for a year in a mill shall qualify them for a total period of a month's leave with or without pay according to the terms of contract or custom of the mill.

Regarding leave, it is essential that some agreement should be reached between the employers and the workers, or the state should fix the number of days of leave with pay by legislation. For few industrial workers in the world need leave with pay so much as those in India, while the grant of such leave will contribute to improve the sense of security, attachment to a particular industrial establishment and hence general efficiency.

(1) 15 holidays with pay including festival days should be given in all mines and industrial establishments except in sugar mills and seasonal factories to all workers after one year's continuous service. A maximum interruption of 30 days is permissible but interruption due to leave for sickness, accident and maternity should not be considered as breaking the continuity of the qualifying period. The proposed legislation of the Government of India to provide for seven days of paid holidays in the year does not achieve the principal objective of such measures. At least 15 days of paid holidays should be ensured and there should not be any distinction made between workers and employees in perennial and in seasonal factories. Workers in mines, plantations, sugar factories and other establishments should obtain the benefit of such legislation. In countries in Europe the duration of holidays varies according to different classes of workers, the length of service and the age of adults and young employees. In Soviet Russia the minimum number of holidays granted is twelve, but this is extended to 24 days or a month in the case of workers under 18 years of age, and 36 working days or one half-month in case of workers who are employed in dangerous and unhealthy occupations. In the mines and the engineering and metallurgical industries in India the duration of holidays granted to workers should be at least a month.

(2) 22 holidays with pay including festival days should be given in the engineering industries.

(3) The number of festival days should be left to be decided by individual establishments.

(4) The sickness insurance scheme should be tried as an experimental measure in suitable centres on a three-party contributory basis, the state including local bodies, the employers and the workers financing the scheme. Until such a scheme is on the way sickness leave should be given according to the following schedule:

(a) For persons who have been in continuous employment up to 5 years: 7 days' leave with full wages and 7 days' with half wages.

(b) For persons who have been in continuous employment between 5 and 10 years: 10 days with full wages and 10 days with half wages.

(c) For persons who have been in continuous employment of over 10 years: 15 days with full wages and 15 days with half wages.

(5) Holidays should be permitted to be accumulated for at least 2 years. This would enable workers coming from long distances to avail themselves of an opportunity to visit their homes in the villages. To avoid inconvenience to industry during the busy seasons in agriculture not more than a fixed proportion of the workers, say 10 per cent, should be given leave simultaneously. The order in which individual workers should be granted leave may be determined by consultation between the management and the union or representatives of workers. Payment for holidays should be made on return of the workers from their leave. This would contribute in some measure to reduce the labour turn-over.

(6) Unskilled women workers are employed in the heavy industries, and it is necessary that they should be granted maternity leave. The Tata Iron and Steel Company and the Indian Iron and Steel Company both allow maternity leave with full pay for 4 weeks both before and after confinement. Similar facilities of maternity leave extending from 3 to 4 weeks' payment of wages are given at Kumardhubi, Ghatsila, Chanch, Mugma and other places. Several provinces are in-

troducing legislation in this regard defining the obligation of all industrial establishments to allow maternity benefit for a fixed stated period. For the sugar factories a period of employment for six months which may be spread over two seasons of the year should enable women workers to obtain maternity benefit. Women, as we have seen, are however seldom employed in the sugar industry. Every Provincial Government should adopt legislation in this regard following the lines of the recently enacted U.P. Act. In 1941 the Mines Maternity Benefit Act was passed entitling a woman in continuous employment for 9 months preceding the date of delivery to receive 8 as. a day for every day on which she is absent from work owing to her confinement during the four weeks immediately preceding and including the day of delivery, and for each day of the four weeks following her delivery.

The Provident Fund and Gratuity Systems for Workers

In a few big industries, there have been introduced schemes of provident fund and payment of gratuity. Several cotton textile mills in the Bombay Presidency have provident fund systems for employees and servants in receipt of a salary of Rs. 30 and over. But the Kohinoor Mills, the Swadeshi Mill at Kurla and the Gokak Mill have contributed provident funds which are open to all employees. In the last mentioned mill as many as 2,000 workers have taken advantage of the facility, contributing at a rate of 5 per cent of their wages, the Company also contributing an equal amount. The Tata Iron and Steel Company at Jamshedpur has a provident fund scheme compulsory for all employees of the Company on the permanent establishment drawing Rs. 15 per month and over or an equivalent daily rate. The worker contributes 1/12th of his salary or wages and the Company makes an equivalent contribution to the fund. Recently some changes have been introduced in the Provident Fund Rules which have caused some dissatisfaction. The rate of interest has been reduced, which it is alleged appears to have been a violation of the Company's Provident Fund Rule 20. The new scheme provides payment of full contribution by the Company on completion of 15 years' membership, whereas the old scheme provides maturity in

12 years, and the starting of proportionate payment of the Company's contribution from the eleventh instead of from the fourth year as in the old scheme. Similarly the Tin Plate Company of India, Golmuri, runs a provident fund scheme, in which the employees may contribute 1/12th of their annual wages and the Company contributes an equal amount. The rate of contribution at the Tata's is higher than that at the Indian Iron and Steel Company, where it is only 5 per cent. But the latter has a gratuity scheme which is more favourable than that obtaining at the Tata's. At Jamshedpur a gratuity amounting to half a month's pay for every completed year of service is paid on retirement to every employee drawing less than Rs. 500 per month who has rendered not less than 20 years' satisfactory service. In the event of the death of the employee, the gratuity is paid to his dependents. The scheme obtaining at Kulti and Hirapur is based on a minimum period of 15 years' satisfactory service, as compared with 20 years of the Tata's. The gratuity is the same, viz. half a month's pay for every year of service, but there is no fixed maximum which is laid down at the Tata's, viz. a year's pay. Work at the steel industry is more strenuous and hazardous; it is desirable that the Tata's gratuity scheme be at least brought in line with that of the Indian Iron and Steel Company. The demand of labour is that the amount of the gratuity should be a month's pay, and not a fortnight's and that it should be earned after 15 years' service. At Ghatsila in the copper mines, a gratuity plus railway fares for the employees and families to their home, is paid to those who retire after 10 years' continuous service. The introduction of such a scheme in the coal mines deserves every consideration.

About thirty cotton mills in Bombay and a few in Ahmedabad give gratuities to some of their workers for long and faithful service. One mill in Bombay, one in Sholapur and another at Kurla give discretionary pensions or gratuities to all widows of workers who die while in service. In the Gokak Mills in the Bombay Presidency gratuities are paid to workers with long service on the basis of 2 years' pay for 20 years' service, 2½ years' pay for 25 years of service and 3 years' pay for 30 years' service.¹ In the Birla Jute Mill in Budge-Budge a

1. Report of the Textile Labour Inquiry Committee, Bombay, p. 319

pension is given between Rs. 5 and Rs. 7 per mensem, to workers who have put in 20 years' service and whose earnings are not more than Rs. 40 per month, or a gratuity amounting to four times the average monthly income. In the Kamarhatty Jute Mill, gratuities are awarded to workers calculated on the basis of the total period of service multiplied by two weeks' wages. All gratuity schemes in India are now voluntary in their character. In view of the impracticability of the adoption of a scheme of old age pensions, it is desirable that in all organized industries the system of paying retirement gratuities after 15 years' qualifying service should be introduced. Both the institution of a provident fund and a system of superannuation benefit are appropriate methods of building up a permanent labour force for an industrial establishment. The Government should be empowered to select industries for the compulsory introduction of the provident fund and gratuity schemes. Employers sometimes withhold payment of their contribution to the provident fund to workers for reasons connected with their union activities. The contribution of the management should be fully paid to all workers, except those found guilty of, and dismissed for, gross misconduct, and also to those discharged due to the conditions of the industry.

Nature and Procedure of Punishment in Industry

The procedure followed in punishing workers for slackness of work, indiscipline and misconduct is very uncertain in most industrial establishments of India. Generally such cases are reported by the workshop foreman or intermediate supervisory staff to the manager or managing agent who deals with the cases. There are ample opportunities for victimization for any reason whatsoever, while the worker always has a grievance when he cannot know in writing what the allegation against him is, or does not obtain an opportunity for explanation. In some of the jute mills of Bengal the number of cases of fines, suspensions and dismissals is far larger than what the conduct of the workers warrants, the cases being disposed of by the departmental head. This is largely due to the surplus labour force always available at the factory gates.

actually worked. At the Tata plant late attendance when not habitual and not exceeding 15 minutes on each occasion is disregarded. Repeated instances are dealt with by deducting an amount from the wages for each day of late attendance in the proportion of the period of lateness to the period of full attendance required, in addition to fine. This is also the practice adopted at the Indian Copper Corporation Works. Here the shift works for eight hours and a worker who is late up to two hours receives $\frac{3}{4}$ shift's pay. If absent 2 hours up to 4 hours he receives $\frac{1}{2}$ shift's pay. If absent 4 hours to 6 hours he receives $\frac{1}{5}$ shift's pay. Such procedure is legitimate. Habitual late attendance deserves severe punishment.

A Graded System of Promotion

We now come to the vexed problem of graded promotion in the organized industries. It may be stated at the outset that in the great majority of the Indian industrial establishments there is hardly any incremental scale, though an individual worker may rise through sheer merit. For over 20 years or more in a jute mill in Bengal, a drawing feeder, a card feeder and a shifter obtain the same wages between Rs. 4 and Rs. 5 with no opportunity for improvement. Most workers, in spite of their seniority, continue on the same wage rate; while it is not seldom that the claims of permanent workers are overridden and outsiders brought in to fill vacancies carrying higher wage rates or salaries. This has been the cause of no small dissatisfaction among the workers, with whom graded pay is very popular and its absence regarded as denial of just claims of promotion. On the other hand, there are some instances in which an incremental scale of wages has been adopted even for unskilled workers. Apart from the railway workshops where this system has been continuing for some years, the Tata Iron and Steel Company have adopted a scale of increment for men and women coolies in the Noamundi mines. The former rise from 5 as. to $7\frac{1}{2}$ as. and the latter from $4\frac{1}{2}$ as. to $6\frac{1}{2}$ as. in a year. The Patna Electric Supply Company have also adopted recently a scale of increment for their unskilled workers who begin at Rs. 15 a month and obtain an increase of 2 as. every year up to

Rs. 17 a month. In the engineering industry in other countries, the principle of a fixed rate for a fixed job obtains. In this country, however, the minimum wage is so low and the wage rates are so different for similar jobs that so far organized unionism has only demanded a graded system of promotion to be made applicable not merely to supervisory and clerical posts but also to skilled and unskilled workers of all categories. No doubt a properly devised plan of promotion paying consideration to both efficiency and length of service has been found by experience in the advanced industrial countries of the world to promote the workers' efficiency and loyalty to the industrial establishments. Slichter observes: 'When workers can see a definite opportunity to advance by demonstrating their ability, they may be expected to take greater interest in the possibilities of their jobs and not to change readily to others the possibilities of which they do not know. Systematic promotion based upon merit is needed to induce workmen to take a long range view.' In India this consideration is strengthened by the circumstance that in industry conventions have not yet developed which preclude the play of favouritism in deciding promotions and increments which sometimes degenerate into occasional doles to the worker depending upon the sweet will of the intermediate supervisory staff who are in direct contact with him. No grievance of labour is more widespread than favouritism in the matter of lifts and increments which flourishes in a regime of personal rule and disparity of wage rates for similar jobs. At the Tata establishments for most categories of skilled and semi-skilled labourers fixed rates of pay have been laid down for each category or groups within a category. According to the procedure in vogue, a definite number of posts on particular rates of pay (which are stages between the minimum and maximum sanctioned rates of pay of the category) are fixed, and workers are promoted from a lower to a higher rate of pay on the occurrence of vacancies. Occasionally an increased rate of pay within the maximum for a category has been given on personal grounds of long service or special efficiency.

It appears that on the whole there is considerable dissatisfaction

CHAPTER V

CONTRACT LABOUR

The General Vogue of Contract Labour

One of the marked features of industrial employment in India is the engagement of workers by contractors, and the consequent diminution of direct responsibility of the employers towards the conditions of employment, hours of work, and wages, of a considerable section of the labour force. The origin of the wide-spread vogue of contract labour is acute labour shortage, which compels employers to seek the help of labour contractors, sardars and other intermediaries. From recruitment to engagement by the contractors themselves for specific jobs is an easy step in quarrying, mining and some seasonal factory industries. Contractors are still largely to be found in quarrying, in mining, in public works, in the sugar, cotton ginning and pressing factories, in rice and flour mills, and even in engineering and metal works.

Contracts are usually given out for work involving the employment of unskilled manual labour, over which supervision is either difficult or costly. The most familiar examples are building work, the loading and unloading of consignments, shunting of wagons, removal of cinders and ashes and stocking of goods in godowns. Even within the factory, where labour is unskilled or semi-skilled and supervision not difficult, work is allotted to intermediaries within the industrial establishment. In the cotton ginning and pressing factories in the U.P., it is estimated that about 75 per cent of the work is done by contract labour.¹ In the sugar factories also contract labour is met with, but the proportion is much smaller. Within the factory premises contracting and sub-contracting are encountered even in the perennial factories. Certain processes, which need special skill not easy to acquire without great practice, are relegated to contractors or to independent sub-contractors

1. Royal Commission on Labour, Evidence Vol. III, Part I, pp. 146,
227

by the latter. An interesting example is provided by the Government Postal Workshops at Aligarh in the U.P., where a contractor for the supply of locks often gets the casting, machining, engraving and finishing work done by sub-contractors. Similarly, the making of durries, tents, tailoring, and in some concerns dyeing, are given out on contract to men who engage their own workers. The actual work is sometimes done on the factory premises, in which case the chief employer is in a position to supervise and control. But when work is taken out and undertaken in small lots in scattered establishments, wages are very low, while the conditions of work are neither satisfactory nor hygienic. Figures are not available as regards the number of workers under labour contractors. But the employment is large enough to justify special examination of the subject. It has been estimated that while the total number of factory workers in the United Provinces is now 254,000, the labour engaged by contractors who do not come within the purview of the Factories Act amounts to about 100,000 workers.

Contract Labour in Quarries and Mines

The most extensive employment of contractors as intermediaries is found in quarrying and mining in different parts of India. In the Central Provinces more than 50 per cent of coal is raised by contract. In the Ballarpur colliery all work, excluding safety work, ultimate supervision and management, is done through contractors. In the manganese mines, ore excavations, loading and building work are done on contract. In the Madras Presidency the quarrying work is mostly given on contract. In the Vizagapatam district the system of entrusting the work of mining manganese ore in mines to contractors is prevalent; these contractors have sub-contractors who get the work done. The system of engaging contractors as intermediaries is also wide-spread in quarrying and mining in Bihar. The present writer has had an opportunity to study the labour conditions in the quarries at Baulia, Dumarkar, Pakur, Sheikhpura, Manpur, Gaya, and other places in Bihar. The workers often have to be attracted and retained in the quarries by the system of advances. The contractor who re-

cruits and employs the labourer advances him money, and until the labourer is able to repay he is bound to remain with the contractor. If the labourer goes to another contractor, the advance made by the original contractor has to be paid by the new contractor. Many workers are thus brought to Bihar from Central India (Rewah and Maihar), Rajputana and the U.P. and live in a sort of debt bondage for a period which extends even to 5 years. The stipulation in the case of emigrant labour is that the return fare is paid if the worker remains in the quarry for a period of, say, a year. At Sheikhpura, one government witness pointed out before the Bihar Labour Enquiry Committee, goondas are employed by the contractors to prevent emigrant labourers from leaving the quarry. At Pakur and Sheikhpura the work is briskly carried on only for five months, Magh to Jaishtha. Elsewhere work may be more regular and continuous. Everywhere there are boxes which measure the amount of broken stones of different sizes which govern wages on the piece-work basis. There are also trolleys and tubs which measure the volume of work—breaking, chipping and loading stones. Wages are exceedingly low. Boys and girls who work in the quarry, sometimes against mining regulations, earn generally 6 ps. to 2 as. and men and women 3 to 5 as. Advances for debts are deducted from wages day to day. At Sheikhpura there is a deduction of 1 anna per trolley for the sake of bustee repair. There is a sardar, who is in charge of a group of 12 to 16 workers, earning a commission of about Re. 1 for each set of 3 to 5 workers. Sometimes the sardars are also workers, but often they do not undertake manual labour at all and live on what they can screw out of the wages of their gangs. Under the contractors there may be sub-contractors in the quarries. At Baulia there are about 34 wholesale contractors under whom there are quite a large number of sub-contractors, about 150, who recruit labour and act as a sort of mates. All sub-contractors, however do not work. Some only supervise the work done by the coolies. The net result is that the contractors and sub-contractors retain an adequate margin of profit which trenches upon the earnings of the workers. This is the inherent defect of the organization itself. To give an instance, the

rate at which the wholesale contractor supplies lime-stone at Baulia to the Sone Valley Portland Cement Co. is Re. 1 per ton but the contractors' rates for the sub-contractors are 9½ to 12 as. per ton. This leaves a margin of 5 to 7 as. per ton. It is the sub-contractor who supplies tools and explosives for the quarry men and also provides the hutting. Both the contractor and the sub-contractor have been found either to intensify the labour of the quarry men or reduce their wages by linking the daily rate of wages (6 as.) with piece-work (say five trolleys of load). The daily rate of 6 as. is reduced to 5 as. if 5 trolleys be not loaded. The contractors and sub-contractors in such a case get 3 as. per trolley.

Need of Regulation of Quarry Labour

If the organization itself has its inevitable drawbacks, the employment of labour recruited from considerable distances leads to serious abuses. We have come across cases where contractors of quarries which are buried in the jungle have run away without paying the coolies their dues. For even a whole week quarry men are made to remove over-burden for which they do not get any payment. The contractor's quota of work is reduced, but the workers are compelled to remain at the quarry even though there is no work nor earning for them. Here and there night work is done in the quarry, and women are also found to work at night. Children are brought too near the working faces and exposed to sun and rain. Women who cannot work continuously and want rest for some days or become pregnant are punished with dismissal from the group. Wages are paid in dribs and drabs. Sometimes the payment is delayed for a month, even for several months. Meanwhile small advances are given to the workers for subsistence. Elsewhere chits are given, the production of which enables the workers to obtain the necessaries of life from the contractor's own shop. In one place the contractor has been found to own a cloth shop and the workers' earnings have to be spent for the purchase of clothes irrespective of their requirements. There are also chronic complaints regarding under-payment of wages due to workers being compelled or deceived to over-load boxes, tubs and trolleys. Fines are imposed for the

breaking of tools, etc., that are heavier than the offence warrants.

Quarry labour is important in India and it is necessary to regulate the conditions of its employment. It is desirable, in the first instance, to eliminate the dangers of unorganized recruitment of aboriginal labour from distant provinces for the quarries. The recruitment of quarry labour may be controlled on the lines of the Assam Labour and Emigration Acts. Thus no quarry labour may be permitted to be forwarded to a quarry in another province except through depots maintained by employers or a group of employers approved by the local government. After the emigrant workers' arrival in the quarry, steps should be taken for securing their adequate protection. It is suggested that the workers should have the right of repatriation after three years of employment, the employer giving them the railway fare and the means of subsistence. Above all, the Mines Act and the Payment of Wages Act should be extended to all quarries and mines. In Singhbhum 46 mines are at present working under the Mines Act and the Payment of Wages Act. About 22 are not under the Mines Act. According to the present regulations, the quarries must be more than 20 ft. in depth and must employ 100 men, for the Acts to be applicable. It is very necessary to have these modified in order that the two Acts might be extended as far as possible to all quarries irrespective of the number of workers employed and the depth of the working.

Such extension of the Acts is even more necessary for the mica mines, many of which are buried in inaccessible jungles and defy frequent inspection. In Dhap conditions of employment leave much to be desired. Women may be found still employed underground here and there. The hours of labour are longer than what we find in the records. There are found, for instance, two shifts of 6 hours each in 24 hours for each worker (12 p.m. to 6 a.m. and 12 a.m. to 6 p.m.; thus the employers get work for 12 hours at the rate of 3 as. per shift). Intermittent cultivation in the neighbouring villages and the opportunity of casual labourers drawn from them for earning more in a shorter period, irrespective of the mining regulations, have led to serious abuses. The majority of the

mica mines are situated at considerable distances from the nearest hospital or dispensary, and the water supply is inadequate and sometimes precarious. Here, again, mining regulations cannot be enforced. Several mine owners run shops where the miners purchase their necessaries in lieu of wages, often at higher prices than what the distance of the place warrants. The shop-keeper keeps account of such weekly purchases on credit on the part of the workers who are apt to be extravagant. Week by week deductions are made from wages but accounts are not scrutinized by anybody. Wages though low have sometimes been found in large arrears for not an inconsiderable period. During our visit to Kodarma we found that one large mica firm had not paid wages to its miners for more than a month. The extension of both the Mines Act and the Payment of Wages Act and frequent supervision can alone check these abuses.

The Raising Contractor in the Colliery

When the Royal Commission on Labour visited the Bihar coal-fields about 12 years ago, it was found that the greater part of the output of coal was obtained by labour working under raising contractors. It was estimated that in the Jharia field they were responsible for about 70 per cent of the output. The raising contractor receives a fixed amount per ton, in return for which he recruits the workers, mines the coal, loads it into wagons, and generally looks after the interest of workers in the mines as well as in the dhowrahs. Now in Jharia except in the larger collieries, the raising contractor has been almost entirely eliminated. Some large collieries also have for many years worked successfully without the aid of contractors. On the whole it may be estimated that the employment of labour under sarkari and contract is now about half and half. Again, in the same mine we may find the system of raising coal partly by the raising contractor and partly by direct management. As regards the contractors' rates, all contractors do not have the same liability and rates are based not only on local conditions but also on the liabilities which the contractors have to meet. These liabilities include use of 'country' gun powder or 'permitted' explosive, the payment of part opera-

tion charges, the cost of fuel for generating power, etc. Even under the raising contract system, the method is sometimes adopted of direct payment to labour by the management. This is of distinct advantage to the labour force since the latter shows more consideration than the contractor. Where the labour force works under the raising contractor, the manager usually divests himself of the responsibility of the selection of the miners, the distribution of their work, the hours of work, and payment, or even the numbers employed, which are adjusted by the contractor to the fluctuating demand for coal and methods of work.¹ Often does the raising contractor insist upon his sardars to compel miners to over-load their tubs above the standard level, while he is also known even to retain money due to the miners. This is especially so when extra rates are paid for difficult work. Such is the control of the raising contractor over the miners' employment that they do not dare to appeal to the management in such cases. For at least hard working faces where additional rates are given it would be better if the wages were paid direct to the miners. On the whole, however, so long as the contractor obtains an adequate rate from the management, he treats his workers well. Besides, he advances considerable sums to miners to tide them over difficult times. Such advances often become bad debts and cannot be recovered. No manager of any mine worked on the sarkari system will take the responsibility of advancing money to miners and the latter are, therefore, dependent on weekly wages only. Again, the raising contractor sometimes combines the functions of the employer, money-lender and landlord which slip into one another both to the advantage and disadvantage of the workers. The colliery itself would let out land at nominal rents to the raising contractor who allots them to his miners. Or the raising contractor has his own zamindari and regularly employs his tenants as labour force in the mines.

Regarding the effects of a low contract rate, the instance of the E.I.R. and B.N.R. joint colliery at Bokaro, which is one of the biggest in India, may be cited. Here the raising contractor's rates fixed by the Railway Board gradually declined

1. See also Report of the Royal Commission on Labour, p. 49

in recent years from Re. 1-12 per ton loaded into wagons to Re. 1-8, then to Re. 1-3 and to 10½ as. Now this has been further reduced to 7½ as. per ton. Before 1934 the tub rate was 6 as. The raising contractors now pay 5 as. per tub to the coal-cutters plus 3 pies as commission to the sardars. The rate has practically been reduced to 4½ as. for coal piled upon each tub by the miner. It was pointed out that the miners were filling the coal into the tubs by placing lumps in such a way that there were big empty spaces inside the tub when it was full. In order to prevent disputes or cutting of the rates to allow for this an arrangement has been entered into between the sardars and the contractor whereby the miners fill one extra tub for every ten to allow for this method of filling. The policy adopted by the Railway Board in accepting the lowest tender indirectly contributes to reduce the wages of the miners in spite of a safe-guarding clause in the agreement.

Necessary Steps for the Elimination of the Raising Contract System

The evils of the raising contract system have been fully discussed by the Royal Commission on Labour. During the last 12 years the system has been attenuated though not entirely eliminated. The main reasons why it still persists are the necessity of recruitment of the labour force and the difficulty of a manager to carry out his mining duties efficiently and at the same time control and recruit workers should the mine be for some reason or other not attractive enough. The first difficulty is overcome as the labour force comes to be stabilized. As a matter of fact sarkari working contributes to such stabilization, since the labour contractors seek to obtain labour from different groups and areas. As regards the second difficulty it cannot be overlooked that, according to the mining regulations, it is the manager who is responsible for compliance with provisions in respect of safety, hours of work, conditions of employment, housing and other matters concerning the welfare of the workers. The raising contract system introduces in practice a dual responsibility, and the law should be tightened so that the management discharges completely its varied responsibilities. This will indirectly

bring about the elimination of the raising contractor. Another step which may help towards this process is the appointment of labour officers under the management for the supervision of labour both in and outside the mine. Some collieries have already employed labour officers, and the system deserves wider adoption.

The extent to which contract labour obscures the present irrational methods of work is often overlooked. In the first place, the employment of the raising contractor reduces the responsibility of the management towards housing, sanitation and other matters connected with labour welfare. It thus indirectly prevents the development of a stable labour force. Secondly, the raising contractor who has to keep large numbers of miners in reserve to cope with migration for agricultural operations and sudden increase of coal raisings, tends to admit more workers into the mine than can be fully employed. A floating reserve of labour is in fact always in the dhowrahs at the beck and call of the contractor who has to handle abnormal rush of work for a short period as, for instance, when there is an unexpected supply of railway wagons which have to be loaded quickly. The surplus labour clamours for work and the management finds it difficult to refuse permission to the contractor when he wishes to introduce underground more workers than are required for efficient working. Thus tubs run short, and miners have to spend long idle or semi-idle hours underground. All this is responsible not merely for low normal earnings and habits of idleness and irregular daily attendance of the workers, but also for increase of cost per unit. The management, it is urged, cannot control seasonal absences and the short week worked by most miners except through the intervention of contractors. Wherever large collieries have shown successful management without the aid of contractors, it is found, however, that the manager takes ample steps to provide adequate haulage arrangements and a good supply of mine-cars or tubs and for the maintenance of a properly laid track. The introduction of auxiliary haulages, jigs, lines up to the working faces, and bye-passes to facilitate quick return of tubs, employment of special staff to watch supply of tubs to mines and their quick return to the main haulages,

are necessary steps that have been adopted for increasing the output obtained by the individual miner. As these are more and more adopted in the mines, more regular and efficient work will be secured, and the need of the raising contractor for counteracting the miner's present irregularity or slackness will be outgrown. The introduction of a system of guaranteed minimum output for every coal miner or loader who goes underground and works on piece-work basis is also calculated to improve the efficiency of work and contribute towards the elimination of the raising contractor.

The standardization of tubs, the introduction of a system of check weighment which may prevent abuses in weighing, the adoption of the Japanese practice that no deduction should be made from payment of miners for rubbish which does not exceed 5 per cent of the tub's capacity, the supersession of the present system of the distribution of bonus to the supervisory staff due to surplus coal, by the practice of additional payments to miners when tubs are loaded beyond the standard level, the careful adjustment of payment of allowances over and above the basic tub rate to difficult working faces—all these are calculated to encourage efficient working. Rational working methods and organization will concentrate attention in the mines on the output of the individual miner rather than the gross output which is now being stressed in the regime of contractors.

The Role of the Sardar as an Intermediary

Another kind of an intermediary between the management and the miner is the sardar. He fulfils certain useful functions at present. He keeps himself in touch with the miners' villages and districts, and thus enables semi-idle agriculturists to find employment, and having found employment for them forms a stable link between them and their families. He often stands guarantee for advances to the workers from the Company or from the contractor, thus enabling an unknown miner-cum-agriculturist to obtain an advance he may require and the sardar definitely is responsible for that debt, should the worker abscond. He is also responsible for the tools issued to the miner by the management or the contractor.

In most of the working faces, the men must work in gangs. The sardar collects them to go underground and leave the pit regularly, and sees to the distribution of tubs. He also assists the management in the supervision of their work. Further, he looks into the inconveniences and difficulties of the miners, and gets them redressed through the management. He does fight for his men, securing for his entire gang proper working faces and adequate tub supplies and particularly looks to the safety of raw and unskilled miners and loaders. In these days of dawning social sense amongst the workers, any serious abuse and financial exploitation of the workers by the sardar quickly comes to light, and as this social sense is further developed these abuses will be things of the past.

The sardar is usually an intelligent and experienced miner himself and is the recognized spokesman of 40 to 50 or even 200 miners who are benefited by his intelligence and experience in many ways. For his services he gets a commission from the management of, say, 6 pies per tub of coal raised by his miners. In his case, too, as rational methods of working and better organization are introduced, his services will become less and less important. But unlike the raising contractor he will die hard. It will not be feasible to do away with the sardar until the miner is better educated and has settled down permanently to mining as a livelihood.

Contract Labour in the Sugar Industry

Contract labour, as we have already mentioned, is also to be seen in general industries outside the field of temporary constructional work. In the sugar industry the majority of the establishments employs contract labour for the unloading of canes from bullock carts, conveyors, and railway wagons as the case may be and for bagging sugar, removing the bags from the drying place to the godown and loading wagons for despatch. The donga carriers employed by contractors are the least paid among the workers in the sugar industry, and we have found even under-age boys being employed. A typical instance of the contractor's payment of wages is adduced: Between 18 and 24 coolies are employed in emptying 12 wagons of sugar-cane brought to the factory in 8 hours. The rate

is 6 as. per wagon. When only 18 are employed the contractor gets the difference. Elsewhere the contractor pays the donga carriers Rs. 8 per mensem per capita; the management when it has directly engaged the labour pays at the rate of Rs. 10-4 per mensem. For bagging, the rates in another factory are like these: The management pays to the contractor Re. 1-14 for sewing and Re. 1-6 for loading 100 bags and removing these from the godown to the railway wagon for despatch, making a total of Rs. 3-4. The contractor employs a gang of 32 men who earn on these 100 bags: Re. 1-12 for sewing and 14 as. for loading.

Contract labour is employed, as a rule, for work of a casual and temporary character in all factories such as new construction works or to cope with sudden rush of work for a short period, as for instance, unusually large influx of raw materials and despatch of finished products. In most industrial establishments loading and unloading of raw materials and finished products are handled by contract labour. Yet that the contractor is not indispensable is indicated by the fact that the Barchakia sugar factory and the Kumardhubi Fire Clay and Silica establishment have taken over successfully the tasks of loading and unloading from the contractor. Building and construction work of various kinds undertaken whether by Government or by private citizens is also done largely by contract labour.

Need of Regulation of Contract Labour

It is necessary that the problem of control of contract labour be now systematically tackled. The introduction of a fair wages clause in the case of employment of contractors by the management should be insisted upon in all cases. The actual wage rates for different kinds of work should be specified in the agreement, while the management should undertake supervision to see that the agreement is strictly adhered to. The Tata Iron and Steel Co. have introduced in the case of the contractor's labour a provision in the agreement requiring him to pay not less than 8 as. per man and 6 as. per woman per diem, and the Labour Officer of the Company is entrusted with the duty of seeing that this provision is scrupulously

observed. In spite of this, however, it was pointed out in oral evidence before the Bihar Labour Enquiry Committee by two women employed by the contractor in road metalling that they were being paid from 2 to 5 as. per diem. Boys and girls below 12 are also employed and they are paid 1½ to 2 as. per day. It is necessary that the contract should specify the age below which workers should not be employed. The minimum age of employment, it may be suggested, should be 14 years. Where labour is brought from a distance, as in quarries and mines, and the number of labourers exceeds one hundred definite rules should also be framed compelling the contractor to provide proper housing and sanitary arrangements, treatment of cases of sickness and accidents including accommodation for infectious diseases. The present writer has come across instances where the Workmen's Compensation Act is disregarded by the contractor in cases of accident. Facilities of medical aid and treatment of maternity cases are as a rule inadequate and sometimes nil, while even water supply runs short in the hot season. Hours of labour need also to be regulated. The permissible head loads for men and women should be specified. Not merely in the mines and quarries but also in the building industry, loads carried on labourers' heads are sometimes found too heavy for them to carry. Soviet Russia has reduced the loads to be so carried and fixed the maximum. The maximum load is 40 lbs. to be carried at one time. In India a statutory regulation is specially necessary to reduce the loads carried by women. It may be suggested that the head load for women should vary from 30 to 35 lbs. and for men 35 to 45 lbs. Both in the mines and quarries as well as in the building industry the load and standard of depth and lead should also be prescribed. Some quarry work is even more strenuous than underground work. The Inspector of Mines in India in presenting his evidence before the Bihar Labour Enquiry Committee observed that the steepness of the roads up which loads are carried is sometimes as much as 1 in 2, and it is extremely difficult and probably injurious to workers to carry weights of 60 lbs. on the head. He is of opinion that in some quarries the employment of women should be prohibited. He agrees with the present writer that 35 lbs.

is a reasonable figure for the fixation of the maximum load. The maximum load should be further reduced for the workers where the depth and lead exceed a certain number of feet. The corollary of these regulations is that workers in quarries should be provided with standardized baskets (tukris or dalis) which when loaded must not exceed the maximum weight prescribed.

Lines of Regulation of Wages and Conditions of Employment of Contract Labour

In India the system of employment of labour through the contractor is ancient, but the time has come when it calls for regulation. Such regulation should begin, in the first instance, with contract labour in industrial establishments, mines, and quarries under the Indian Factories and Mines Acts. The Government, municipalities, district boards and other local bodies should also devise suitable machinery for strict supervision and enforcement of regulations concerning contract labour employed on construction, maintenance and repair work entrusted by them to contractors.

All big constructional projects whether of the Central or Provincial Government or of local bodies are entrusted to contractors. Irrigation canals and barrages, tanks and tube wells, roads and government buildings are all constructed by Government through contractors who employ and manage labour in these various undertakings. All over India earth-diggers, stone-breakers and road-menders are employed by contractors who obtain a good margin of profit on the tenders accepted by the Government and local bodies who rarely undertake public works directly. The labourers get advances of Rs. 2 to Rs. 3 each month for food, which are recouped at the end of the month. Work begins usually at 7 a.m. in the morning and ends at dusk. Boys and girls of 9 and 10 are engaged for breaking brick-bats, earning only 1 to 1½ anna a day. Women usually earn 6 to 8 as., and men labourers 8 to 10 as. daily. Where the work continues for over a few months, ramshackle bamboo and mud huts are built by the labourers, which cannot give adequate shelter against the sun and rain, and are in fact unfit for human habitation. In many cases the contractor runs

the grocer's shop for the supply of food-stuffs in the labour camp. The scale of prices charged by contractors is too often heavily weighted against the poor and ignorant labourers, while it is not seldom that contractors withhold payment of wages for a long time, and even abscond without payment. The Government which is chiefly responsible for the concentration of large bodies of men whom it hands over to the contractors, hardly assumes moral responsibility for the health and welfare of those who deliver the goods. It will be necessary, as in the employment of labour by contractors in quarries, mines and road construction, to insist upon housing, sanitation and other services, while minimum wage legislation should protect the workers against sweating. If the contracts are given for over a long term, provision should also be made for increment of wages paid to the workers, and for corresponding additions to the rates payable to the contractors. In fairness to the large body of workers who are employed by the Government through the contractors, the Government should be prepared to face an increase in the cost of such undertakings. The local bodies should also take the cue from the Government policy in respect of the treatment of labour by public works contractors.

Workers serving under contractors are with few exceptions grossly exploited. They are usually paid much lower wages than those paid to corresponding categories employed departmentally. Their wages are often reduced on flimsy pretexts, their hours of work are generally longer; while it is unusual that suitable housing accommodation and medical aid are provided for them. The contract system should be everywhere discouraged and altogether eliminated from certain fields of work where it now persists.

A distinction should be made between work of a casual and temporary character as, for instance, construction of buildings and structures and erection of plant and machinery—where the contract system may be forced by the necessity of quick execution and by the kind of work altogether different from industrial operations—and those kinds of labour which are incidental to the processes of the industry itself. Contract labour should not be permitted in the latter cases. Among these should be included the loading and unloading of raw

materials and the handling and despatch of finished products in all industries. If in any factory, mine, or quarry, special practical conditions and circumstances stand in the way of elimination of the contract system, the Government should be empowered to make exceptions for a period during which suitable adjustments might be made.

Where contract labour would have to continue, steps should be taken to ensure that the labour force of contractors receives a fair deal. In no case should a contractor pay a wage lower than the minimum wage fixed by legislation. The actual wage rates for different categories of workers also should be specified in the agreement between the management and the contractor, while the former should undertake supervision, to see that the agreement is strictly adhered to. In respect of categories of labourers who when employed departmentally are paid a wage not exceeding Rs. 50 per mensem, the contractor must pay his workmen, category by category, the same scale of wages as are paid for departmental workers in the same place, or in the vicinity if no similar work is performed in the same place. Where there are two or more concerns in the same place employing departmental labour of the categories employed by a contractor, the legal obligation of the latter should be limited to the lowest scales of pay for departmental labourers.

The provisions of the Payment of Wages Act and the Workmen's Compensation Act should apply fully to the labour force of all contractors. The provisions of the Indian Factories Act or of the Mines Act, as the case may require, should be made fully applicable to contract labour when at least 100 workers are employed by a single contractor. Any contractor, who employs at a time 100 workers or more should also be required to take a licence from the Government. Where work is continuous for at least 2 years, definite rules should be framed compelling contractors to provide proper housing and sanitary arrangements, treatment of cases of sickness, including accommodation for infectious diseases, and accidents.

Contract labour in the mines and quarries raises the more difficult problem of control and regulation, as we have indicated before. The improvement in mining working methods

and in the organization of the industry will effectually contribute towards the supersession of the raising contractor. Other necessary steps which are calculated to promote the employment of labour under sarkari are:

(a) Introduction of a minimum wage and basic tub rate for contract labour,

(b) Enforcement of similar conditions of employment and rates of wages for similar categories of jobs and workers under the contractor,

(c) Enforcement of the condition that the labour force should not be permitted to be disbanded or disturbed by a new contractor when an agreement terminates,

(d) Insistence on the responsibility of the management towards housing, sanitation and labour welfare in general, and

(e) Generally speaking, the acceptance of the legal position that the raising contractor is the agent of the management.

The Government should early introduce these changes in all mines and quarries with a view to elimination of the raising contractor.

CHAPTER VI

WOMAN AND CHILD LABOUR

Employment of Women and Children in the Plantations

There is a considerable volume of employment of women and children in industrial establishments in India which has raised certain special problems of its own. The plantations employ more women in the aggregate than any other organized industry. But both seasonal and perennial factories also employ women and adolescents and children in large numbers. In the plantations, out of 1,907,126 persons in 1931, 693,299 or over 36 per cent were women. Figures of the employment of children in all the plantations of India are not available. But we have figures for the Assam tea gardens. In 1935-36, the number of children registered on labour books of the Assam tea gardens was 78,418, the daily average working strength being 54,928. The corresponding figures for 1941-42 were 104,085 and 68,965 respectively. Such increase of child labour

has been due to the shortage of labour in plantations caused by the sudden increase of quotas of tea production, garden by garden, and the drafting of the adult estate labour for the various war projects on the Eastern Frontier. No doubt the large increase in the proportion of child labour in the tea plantations is as undesirable as the re-admittance of woman labour underground in the mines. The right method of counteracting the shortage of labour in both cases is the improvement of wage level and of health and housing standards along with other amenities for the workers.

No accurate figures of wages of children in the tea gardens are available. But roughly speaking they earn between Rs. 4 and 5 per month as compared with Rs. 7 to 8 and Rs. 10 to 12 earned by their mothers and fathers respectively. On the tea estates a distinctive feature of work is that the labourer works with his family, the wife and the children also being wage-earners. Regular employment is available for women and children on a tea garden, but not in a mine or factory. In Assam a boy or girl may be working with and earning the same as his or her mother, as for instance 3 to 4 as. per diem for pruning 70 large bushes or 100 small bushes. Children can do forking and weeding properly and are also employed in the nursery. In fact they obtain regular employment throughout the year in the tea gardens and in a busy season undertake the women's jobs though their hazira rate is lower. When the plucking season is on women however earn much higher wages than their children and even more than their husbands. Thus the earning of women in July, August and September would come up to Rs. 10 to 15 per month whereas the average for the whole year would be about Rs. 8. Only adult workers can do pruning properly.

Women and Children in Factories and Mines

TABLE VIII overleaf shows the distribution of labour in perennial and seasonal factories.

The proportion of women and children employed in mines is given in TABLE IX. The employment of women and children was considerable in the past, but the employment of children under 15 years of age in mines was prohibited while

women were also excluded from underground labour between 1937 and 1943.

TABLE VIII
Category of Workers in Perennial and Seasonal Factories in 1936¹

Category of workers	Total workers in all factories	Workers in Perennial factories		Workers in Seasonal factories	
		Number	Percent- age of Total	Number	Percent- age of Total
Men ..	1,376,185	1,161,338	84.4	214,847	15.6
Women ..	234,206	152,921	65.3	81,285	34.7
Adolescents	29,694	20,647	69.8	9,047	30.2
Children	12,062	8,814	73.6	3,248	26.4
Total ..	1,652,147	1,343,720	81.3	308,427	18.7

Of the 12,062 children, 9,338 were boys and only 2,724 were girls.

TABLE IX
Woman and Child Labour in Mines, 1901-1936²

Year	Men		Women		Children		Total
	Number	Percent- age of Total	Number	Percent- age of Total	Number	Percent- age of Total	
1901	69,025	65.9	30,488	29.2	5,147	4.9	104,660
1924	164,402	63.7	87,434	33.8	6,381	2.5	258,217
1926	181,616	69.8	78,497	30.2	..	..	260,113
1933	171,038	82.8	35,469	17.2	..	..	206,507
1936	226,958	84.2	42,635	15.8	..	..	269,593

Economic Consequences of the Exclusion of Women from Underground Work

The exclusion of women miners and loaders had been carried on in the mines gradually so as to mitigate its economic effects and to permit women being absorbed in other occupations or leave the coal-fields for occupation elsewhere. The net results of the exclusion were that most of the women migrated from the collieries or were left behind in the villages. In

1. Statistics of Factories subject to the Indian Factories Act, 1936, p. 30.

2. The Annual Reports of the Chief Inspector of Mines in India for the years indicated.

the bigger collieries some accommodation for woman labour on the surface was possible. Thus women who originally worked underground were employed in the bigger collieries on such jobs as loading wagons, screening and stacking coal, making and repairing roads and drains, petty earth work, cleaning lamps, working with masons and also in cleaning up in the colliery lands to improve the general sanitary conditions. A typical instance is given from Lodna Colliery in Bihar. In 1929 the average number of women employed underground at Lodna and Bhaga Collieries was 698. By October 1937 these women were excluded from underground. In October 1938 the collieries employed 361 women on the surface who were previously employed underground. Of these 281 were employed on the depots and screening plant and 80 on earth-cutting for stowing purposes.

Wage rates were as follows:

Coal loaders on the depot ..	4 as. per day
Shale Pickers on the screening plant ..	4 as. per day
Stowing kamins on contract ..	4 as. per day

On the whole, however, a very small percentage of the women who originally worked underground was able to be accommodated on the surface in odd jobs. The estimated figure is 10 per cent. Formerly as the miner and his wife worked underground jointly in cutting and loading coal the pair could easily load at least 3 tubs of coal, i.e., their total earnings were 15 as. per day. Since the exclusion the male worker singly cannot cut and load more than a tub of coal per day, i.e., his earnings come down to 5 as. per day. His wife when employed by the company, is paid 4 or 5 as. a day, while if she is on casual work for contractors she is paid on piece rate and earns between 2 and 5 as. a day. Her average earnings vary between 2½ and 4 as. per day in the different collieries. But it is difficult for women to obtain employment for all the six days of the week. Especially is the condition of the unattached women and widows precarious due to the competition for the limited number of jobs available on the mine surface. At the Kangali colliery, it is estimated that the earnings of a married man whose wife formerly worked underground with him have been reduced by 30 to 35 per cent. As regards the earnings

THE INDIAN WORKING CLASS

of the women themselves, TABLE X below shows the difference between 1929 and 1938:

TABLE X
Average Daily Earnings of Women in Jharia

	Underground	Open workings			Surface
		Rs.	As.	Ps.	
1929 ..	0 8 6	0	9	0	0 6 9
1938 ..	..	0	4	3	(Jharia) 0 4 0
					(Bokaro) 0 2 6

The following schedule gives in detail a comparison of two average coal-cutters before and after the final exclusion of women from the Mudidih Colliery:

TABLE XI

1937		Rs. As. Ps.
'A'	and wife for week ending	9.9-37
Do.	" "	16.9-37
Do.	" "	23.9-37
Do.	" "	30.9-37
		22 11 0
Average earnings per week—Rs. 5.10.9		
'B'	and wife for week ending	9.9-37
Do.	" "	16.9-37
Do.	" "	23.9-37
Do.	" "	30.9-37
		19 8 6
Average earnings per week Rs. 4.14.1.5		
1938		
'A'	and the male loader not belonging	
to the family	for week ending	9.9-38
Do.	" "	16.9-38
Do.	" "	23.9-38
Do.	" "	30.9-38
		26 4 0
Therefore average earnings per week—Rs. 6.9		
A's portion 4/7ths; the male loader's portion 3/7ths		
As the tub rate is 7 as., the male loader received 3 as.		
out of this		
Therefore A's average earnings per week—Rs. 3.12		

A's wife's earnings per week 10 as. (worked on surface).

Therefore total income of A's family=Rs. 4-6
'B' and the male loader not belonging

to the family	for week ending	9-9-38	9	3	6
Do.	" "	16-9-33	7	2	0
Do.	" "	23-9-38	1	6	6
Do.	" "	30-9-38	4	3	6

Therefore average earnings per week=Rs. 5-7-10.5 21 15 6

Therefore B's share 4/7ths per week=Rs. 3-2-3

B's wife per week (worked on surface)=Re. 1-8-0

Therefore total income of B's family per week=4-10-3

TABLE XII

Earnings of a miner and his wife, 1937-38

1937

for week ending	9-9-37	5	2	7
" "	16-9-37	6	5	7
" "	23-9-37	7	3	6
" "	30-9-37	6	3	0

Therefore average earnings per week=Rs. 6-3-9

1938

for week ending	10-9-38	5	2	9
" "	17-9-38	4	4	0
" "	24-9-38	5	14	0
" "	1-10-38	4	10	6

Therefore average earnings per week=Rs. 4-15-9

The above examples do not take into account the number of days worked per week.

We accordingly find that the coal-cutter's family earnings have strikingly diminished and that even if his wife finds employment at all, her earnings do not certainly compensate the loss the family has sustained by her exclusion. This has resulted in a general decline of the standard of living of the miner's family. The case of unmarried women and widows has been worse. Since for the limited number of jobs available on the surface for women the management prefers the wives of miners working in the mine, the unattached women have to depend on the off chance of employment by contractors.

Their Remedies

It was anticipated by the Royal Commission on Labour

that the improvement of the conditions of life in the collieries and the increase of the miner's efficiency and earnings will offset the effects of reduction in his family income. During the last decade conditions of life in the mines have not only not improved at all but due to the depression the miner's wages have not shown an increase. The miners, therefore, hardly bring to the mining areas their women when their power to earn is gone. The disparity in the sex ratio has also increased, resulting in absenteeism. Local miners go home more frequently to visit their families; while the number of the Bilaspuri and Sonthal workers has been reduced since the latter do not like to leave their women in the villages. On the whole, competent observers now speak also of a general moral deterioration in the coal-fields.

The deterioration of the miner's economic position has been rather unfortunate since this has largely frustrated the effects of the new legislation intended for his good, and has aggravated the difficulties of social adjustment. All possible steps have to be taken to reserve for the miners' women vacancies occurring among the surface workers wherever practicable. Opportunities for the establishment of auxiliary industries which may utilize coal tar and other by-products of coal and which may employ women should also be explored. Secondly, the management should make a systematic effort at improvement of housing and sanitary conditions, so that the miners may be induced to bring their women to the mining area. Finally, without an increase of the miner's average earnings and efficiency the present loss in the miner's family income cannot be counteracted nor the standard of his home life raised. The introduction of such improvements will strengthen the tendency towards the stabilization of labour force, which has recently suffered a set-back on account of the reduction in the miner's family income, and this will be to the interest of both the employers and the workers.

Reduction of the Employment of Children in Mines and Factories

An investigation of the number of workers in 1030 families in the Bihar coal-fields has revealed on the whole that

60 per cent of the adult women in the mining centres are without employment. The leading classes and castes of the working women are Bauris (58.3 per cent), the C.P. Miners (66), Aboriginals (59), Manjhis (45), and Bhuiyas (35.5). Most of these women workers are coal loaders, wagon loaders and unskilled surface coolies.¹

The reduction of the employment of women has indirectly contributed towards a diminution of the proportion of children working in the mines. But special legislation in respect of the minimum age for the employment of children has also contributed to this. In 1921, 8,548 children under 12 years of age or 3.4 per cent of the total mining labour were employed in mines. In 1926 the minimum age for the employment of children was raised to 13, and in 1935 to 15 years. In spite of the prohibition of the employment of children below 15 years in the mines, children are found in the coal mines to help the parents in tramping or loading or as shale pickers or coolies. In the mica mines also children of very tender age are found to work in violation of the Indian Mines Act. It appears that the certifying authority, the Civil Surgeon of the district, who charges 4 as. for each certificate is not fully alive to his responsibility in this regard.

For the factories the minimum age for admission to employment is 12 years. In the classification of workers the term 'child' means a person between the ages 12 and 15 and the term 'adolescent' a person between the ages 15 and 17. Both children and adolescents while at work must carry tokens giving reference to their certificates of fitness. Such certificates, however, are given without much scrutiny. Yet there has been a marked decline in the total number of children employed since 1923. In that year 74,620 children were employed in the factories. In 1926 the number was reduced to

1. At the end of 1943 the Government of India as a temporary measure permitted the work of women underground in the mines in order to counteract the shortage of labour and marked diminution of coal output that compelled many factories of Bengal including the jute mills to close down for some days in the week and hampered war industrial production. Immediately before the removal of the ban on underground work by women, about 32,000 were employed all above ground. Since the withdrawal of the ban about 10,000 women have been employed underground.

12,062. In the jute mills of Bengal, which in 1925 employed as many as 26,500 children, their employment has now practically ceased. This is largely due to a rigorous application of the protection provided by the Indian Factories (Amendment) Act. The Indian Factories Act, 1934, reduced the hours of work of children (persons between the ages of 12 and 15 years) from 6 to 5 a day and those of women from 11 to 10 a day in both seasonal and non-seasonal factories.

Women and Children in the Mica Industry

If the economic and social condition of women and children has been sought to be improved by legislation applied to both mines and factories, there is a large body of women and children employed in the mica, shellac and bidi factories and rice-mills, the majority of whom do not come under the scope of the Factories Act as the factories are small and do not use power, or the work is carried on in cottages. Of the 127 mica factories in Bihar found in 1930 only one had mechanical power and had been in consequence a registered factory. The remainder were at the time unregulated factories. The total number of employees was then found to be 11,395. Recent figures are not available. The relative proportions of men, women and children in those mica factories, which were selected for special enquiry and were of all representative types, were:

Men	..	..	56 per cent
Women	..	..	17 "
Children	..	..	27 "

By 'children' here is meant all children found in the factory at the time of inspection whether admittedly employees or claimed to be non-employees. The application of this ratio to the 11,395 employees returned for the whole industry, gives an estimated figure of about 6,400 for men, 1,900 for women and about 3,100 for children. There is, of course, no medical examination of children to ascertain their age and fitness, and in most of the factories enquired into some children were obviously under 12 years, and many more were doubtful.

The total number of workers in the mica industry employed in both factories and cottages is now considerably larger

than the figure given above. One estimate makes it one lakh and a half, of whom approximately 20 per cent are women and 30 per cent children. Four factories employ as many as 1000 workers. In some of the mica towns the majority of the houses are mica factories. In dilapidated buildings where lighting is poor and ventilation defective, mica sorting, cutting and splitting are carried on. There is overcrowding in the verandahs, and under-aged children well below the regulation age for such workers in the factories coming under the Factories Act preponderate. A young child is not a separately paid worker. It comes with its mother, sits with her and may or may not help her. Very young children sleep on their mothers' laps as the latter work, their faces and bodies covered with sparkling mica particles. There is not always a clear demarcation between working children and children who come to the factory for family convenience, and in fact both conditions may be found combined in one child. The older children are definitely employees, and their work is paid for separately and directly by the employer. Sorting and splitting are usually the children's job but sometimes they are also employed on cutting. The work involves no great physical exertion for either women or children, and there appears to be no pressure brought on either to work at excessive speed. Nevertheless, the children would be better at school for part of each day and at play for the rest of it.

The number of cottage workers in mica, men, women, and children, has been estimated at about twice the number of factory workers. One factory at Kodarma distributes mica to as many as 1000 cottage splitters coming from a distance of 2 to 8 miles. Work is carried on under more favourable conditions in the cottages than in factories and non-residential premises where the hours of work which are not excessive cause fatigue more easily due to poor ventilation and overcrowding. Hours are, however, too long for the smaller children coming from distant villages if we take into account their time of leaving home and returning to it.

Several kinds of abuses in payment are discernible. One mica factory in Kodarma used to pay or still pays wages in kind. For unsatisfactory splitting, the deduction of wages is

sometimes arbitrary. The present writer has come across cases of regular deduction of 2 chataks from the weight paid at the rate of 7 as. per seer of split mica. There are also regular wage deductions on the following items: late attendance, dasturi, false weighment, bad workmanship and goushala which are all left without control.¹ Yet the employers point out with pride that the Bihar mica splitters have acquired a skill and dexterity which are unrivalled in the world.

Women and Children in the Shellac and Bidi Industries

In the shellac factories, it is estimated that women form about 30 per cent of the labour force and children 10 per cent. Women do the stripping, grinding and sieving while children work as assistants to melters (pherwais) in the stove room. As in mica, so in shellac cottage production is also important. In many homes shellac manufacture is undertaken as a family industry employing about 10 to 50 workers. In Jhalda 8 factories use machinery, employing from 100 to 800 workers. The day's work in the stove room is particularly trying, especially in the hot season. Washing pits, reservoirs and drains are not properly cleaned and emit a disgusting smell while in and around the places of shellac manufacture the refuse water is left to accumulate and stagnate, there being no drainage arrangement. There is hardly any unregulated factory where the dirtiness of the manufacturing processes calls so urgently for washing and sanitary arrangement.

1. The average earnings of women splitters came to only Rs. 4 a month and of children to only Re. 1-12 as splitters and Rs. 2 a month as sorters in the mica industry in Kodarma and Giridih immediately before the war.

The following schedule gives the current war-time earnings in one of the English concerns at Domchanch, where the wage rates are higher than the average in the mica industry.

Skilled A Group ..	Re. 0 12 0	to	Re. 1 4 0	per day
Skilled B ..	0 8 0	"	0 12 0	" "
Semi-skilled ..	0 6 0	"	0 8 0	" "
Unskilled ..	0 6 0	"	0 8 0	" "
Boys (under "training) ..	0 3 6	"	0 6 0	" "

All workers get a dearness allowance of 30 per cent of their earnings. The ticca workers (in factory) earn about 6 as. to Re. 1 per day according to their capacity, plus 30 per cent dearness allowance. The Joint Mica Mission or Government have been supplying a fixed quota of food grains to the mica industry since early 1943 and the factory distributes same to the labourers at cost price.

Another important industry which employs a considerable amount of woman and child labour is bidi making, which is widely spread in the towns of Bengal, Bihar and the C.P. and is also concentrated in some rural areas in Chota Nagpur. Hundreds of young boys are employed for long hours for bidi making in unsatisfactory buildings with leaking roofs and damp earth floors. As in the case of the mica factories, so in the case of the bidi factories there is an intimate relation between cottage and large-scale production. Attendance in both these kinds of factories is irregular and the work seasonal. But when work proceeds the hours of work are excessive. Wages being on the piece work basis, the workers' poverty and small average earnings due to the low piece rate compel them to work for unduly long hours. This is particularly unfortunate, since the majority of the workers are young boys. As in the mica factories, so in the bidi factories, workers as young as five years may be found working without adequate meal intervals or rest days and often 10 to 12 hours daily and for sums as low as one anna and two annas in the case of those of the tenderest years; while there is deduction of 3 pies from each wage payment which is intended for a goushala or thakurbari that only exists in the imagination of the employers. The pernicious practice is also adopted of giving 10 to 15 bidis to each worker, which encourages the habit of smoking from very early years. All workers also have got to wait too long after the work is finished. Work is over, say, by 7 or 8 p.m. but counting sometimes is not over before 11 or 12 o'clock in the night. Counting is necessary for wage payment and thus for all workers and particularly for the small boys the hours which are already excessive are unnecessarily prolonged to the detriment of their health and comfort. Many of them are unable to return to their village homes some miles distant before midnight. Bidi making is also partly done at home where the women participate in the work. The latter prepare the chongs or covers to be filled in with tobacco and packed in the factories. Thus three persons in the family may be making bidis, the women working in their hut and one worker in the factory. They would make in the off-seasons of agriculture 2,500—3,000 bidis every 2 days arranged in bundles of

25 each, earning 6 as. The workers in the factory would spend a whole day in filling 3,000 chongs with tobacco and in packing. But there are rejections; 250 may be rejected out of 3,000 bidis made. Here again even for cottage production there is a deduction of 3 pies and of two bundles of bidis for goushala and dasturi respectively. The rejected bidis are made into fresh bundles and mixed up with the better class of bidis. Wages are paid duly but sometimes a portion is left unpaid as security. This would apply in the case of 10 per cent of the workers.

Women in the Rice-Milling Industry

Another industry in which women are largely employed is rice-milling which is largely carried on in Bengal, Bihar and Madras. In 1929 there were 698 rice mills in the whole of India employing about 40,000 persons. Women are here employed in the drying process, spreading and turning the rice and also on occasions in removing the rice from the hullers and winnowing bran. They have to walk about for long hours under the hot sun in the courtyard which must be without cover, for spreading and turning the rice by the feet or by means of the ladle. Wages here are as low as 1½ anna to 2 as. per diem and sometimes are not paid in cash but 'kuro' or rejected small rice particles are given instead.

Control of Non-regulated Factories

It is necessary that these unregulated factories which are estimated to be as many as 3,000 in the country and which are not subject to the Factories Act should come under some form of control.¹ Only one Province, viz. the C.P. has got an Act (No. XXI of 1937) to regulate labour in factories and workshops employing 50 or more persons engaged in the making of bidis, shellac manufacture, or leather tanning. It is noteworthy that these three industries were specified by the Labour Commission as requiring special attention. The C.P. Act can, however, be extended in its operation to other indust-

1. 2,000 of these employ fewer than 20 persons but employ power machinery; 1,000 do not use power but employ as many as 50 persons or more. See "Industrial Labour in India" (I.L.O.), p. 47.

ries and to workshops employing 25 or more persons. In our view all such factory premises using power which employ 10 or more persons in any one day and those not using power which employ 40 or more persons should be subject to some form of regulation which may, in the first place, be limited to the hours of labour, the employment of child labour, and sanitation and ventilation in the factory premises. This may be done either by declaring by notification such premises as factories under Section 5 of the Factories Act, 1934, or by special legislation. The Employment of Children Act, 1939 has recently prohibited the employment of children below 12 years in such occupations as shellac manufacture, mica splitting and cutting and bidi making. Children of the age 10 to 12 may however be permitted to work in such factories without power for 4 hours with the requirement that education and training have to be arranged for in the factories for the rest of the period. The Employment of Children Act needs improvement and amplification. Children below 10 should not be permitted to work. Those employed full time in the factory should not be permitted to work over-time or to take work home after factory hours. There should also be regulations concerning regular intervals for meals and weekly holidays. Some shelters for taking meals should be provided since the workers often come from distant villages. Since many of these industries employ a large number of women, it is necessary that 'creches' for infants should be established in the factory premises, the Government making the appropriate rules under Section 33 of the Indian Factories Act. Lighting and ventilation, washing and latrine arrangements should be regulated by rules. Workers in these factories are unorganized, while the employers are also mostly persons of no education. The Payment of Wages Act should be extended to these factories in order to counteract the present abuses of delayed payment, wage deduction and fines. All factories which employ women should also give maternity leave. Special legislation should be passed as in Madras, the C.P. and the U.P. to deal with this matter.

Children begin to work in the plantations of India at an incredibly low age. They are started on light tasks on the

gardens 'as soon as they can walk'. The conditions of employment in the plantations should be regulated by Acts, no children being permitted to work who are below 10 years of age. This is the age limit adopted for the employment of children who emigrate with their parents for work in the estates of Ceylon and Malaya. Their period of work should not exceed four hours and there should be a provision that the estate should provide facilities for their education for the rest of the working day.

In respect of the conditions of employment of women and children in industry, India lags far behind the standards of welfare adopted by most industrial countries in the world. Excessive child labour, 'sweating' of women and children and a general unconcern with the fate of human factors in production of quick and unconscionably large profits are blots that demand early removal by labour legislation and Governmental labour services, especially as the old traditions of hospitality and care for dependents are fast disappearing in all forms of employment in India.

CHAPTER VII

WAGES IN THE PLANTATIONS AND QUARRIES

Piece Rates of Wages in the Tea Gardens: Basic and Ticca

The wage system in India can in one word be best described as chaotic. The basis of wage fixation differs according to the industry and the locality. There is no standardization of occupations and jobs, while in spite of the introduction of the Payment of Wages Act (1936), the truck system, delay in wage payment and unauthorized fines and deductions are practices which have by no means disappeared. Nor is the trade union movement strong and wide-spread so as to establish national wage scales. Thus along with the lack of uniformity of the basis for wage payment, striking variations of wages and earnings are met with in the country.

The plantations employ about 1.9 million workers, of whom 1.1 million work in the tea estates. The basis of wage

fixation is as follows: Usually there is the basic rate for the hazira or the standard daily task to which is added an extra for overtime task—ticca, nagda, or doubli. But in certain plantations the hazira task is by no means uniform. Planters have sometimes sought to check the increment of wages by reducing the basic hazira task, and at the same time introducing a second and a third hazira, or what is called the unit system. The time taken for the first hazira is ordinarily computed at four to six hours in the estates of Assam. In the Dooars three and a half hours generally comprise the period for the first hazira; for subsequent haziras the unit is 2 to 2½ hours. The payment for hazira varies from 4 to 5 as. for men; from 3 to 4 as. for women; and 3 as. for children; while the ticca is usually 4 as. for men and 3 as. for women. In the Dooars the hazira rate for men is 4 as., for women 3 as., and for children 1 to 1½ anna. The standard piece rates of wages differ from garden to garden, due to differences in the character of the soil and in the nature of the work. Thus in Assam a coolie is set the task of hoeing 15 to 30 deep nals for a full hazira of 5 as.; for light cultivation the task is 35 to 70 nals for which the same payment is made; for forking the task varies from 100 to 220 bushes in different gardens; for pruning the task of 8 to 10 nals comprising 40 to 50 bushes represents the hazira for the same remuneration. For skiffing, 80 to 120 bushes represent the hazira. For plucking, the hazira rate is usually 5 as. earned by both men and women workers. As soon, however, as the shoots are plentiful, i.e. from July to October, the hazira system is replaced by the unit system. One pice for one lb. becomes the general wage rate. In many estates false weight as well as the computation of a seer of leaves as a lb. deprive the pluckers of their just earnings. During the plucking season the earnings of women exceed those of men. Some women earn about Re. 1 per diem working from 8 a.m. to 4 p.m. with an interval of half an hour for transit and weighment. This, however, sometimes includes the remuneration of children who add their quota of leaves into the basket.

On the Darjeeling tea estates, extra 'leaf-pice' is given for plucking more than a standard quantity of leaf per day, and the standard is varied with the amount of leaf easily available,

so that good workers easily earn double (or more) the daily wage. Children of 3 or 4 years begin to help their mothers, doing plucking for them, the leaves often going into the same baskets. They also do odd jobs, such as carrying manure and hand-forking, on piece rates. In the Dooars children are employed also in catching mosquitoes and insects and applying sulphur to the pruned bushes. One pice is usually given for killing one or two mosquitoes.

On the whole, an attempt is made to ensure that the average hourly earnings of a worker are more or less the same throughout the district as agreed to by the members of the Indian Tea Association or the Dooars Planters' Association in Assam and Bengal respectively. In fact there is an understanding among the employers not to increase the rates of wages. TABLE XIII gives roughly the wage rates for the various garden operations and the hours of employment in Assam.¹

If the coolie does less or more work, the earnings decrease or increase in proportion. Though much is made of 'ticca' work, the opportunities for ticca earnings are in reality small. The earnings from ticca form in fact an insignificant proportion of the labourers' income, not usually exceeding 5 per cent of the latter. Recently, however, the Indian Tea Association have largely expanded their tea output and faced by the dearth of workers who are now being employed for road construction under the Eastern Front Project, have commended a policy of giving the estate workers greater opportunities for earnings instead of increasing the piece wages due to the present high cost of necessaries of life. Thus in many estates the workers are now permitted double hazira at least for four days in the week. In 1943 the percentage of the ticca earnings to the total income of the labourers may be estimated between 33 to 45 per cent.

Difficulty of Estimating Real Wages

The difficulty of ascertaining real wages in the plantations is aggravated not only by the fluctuating character of ticca from season to season and from garden to garden, but also by

1. Sudhendu Mukhopadhyay: "Field Investigation in Tea Estates".

TABLE XIII

Job	Workers	Period for one hazira	Amount of task for one hazira	Amount done per diem	Payment per hazira	Months during which task is done	Time required	Payment
Deep hoeing	Men	4 to 5 hrs.	12 to 16 nals	..	4 as. to 5 as.	Dec. to Apr.	..	..
Light hoeing	"	4 hrs.	35 to 40 nals	..	4 as. to 5 as.	May to Nov.	..	..
Light Pruning	Women	5 to 6 hrs.	80 to 120 plants	..	3 as. to 4 as.	Dec. to Mar.	One hour	..
Heavy Pruning	Men	4 to 5 hrs.	50 to 60 plants	..	3 as. to 5 as.	Dec. to Mar.	..	..
Plucking (fine)	Women	..	..	1 mound leaves	..	Aug. to Oct.	10 to 11 hrs.	..
Plucking (fine)	"	..	..	1 mound leaves	..	Apr. to Jun. & Nov.	9 to 10 hrs.	10 as. to 12 as.
Plucking (coarse)	"	..	..	20 seers to 30 seers	4 as. to 6 as.	May, Jun. & Nov.	8 to 10 hrs.	Re. 1
Weeding	Children	4 to 5 hrs.	70 to 80 plants	..	2 as. to 2½ as.	Plucking season	..	..
Forking	"	4 to 5 hrs.	120 to 200 plants	..	2½ as to 3 as.	"	..	..
Forking	"	3 to 4 hrs.	80 to 100 plants	..	2½ as.	Non-plucking season	..	..
Plucking	"	4 to 5 hrs.	10 lbs. leaves	..	3 as.	Plucking season	..	..
Plucking	Men	..	..	1 mound leaves	..	Aug. to Oct.	12 to 13 hrs.	10 as. to 12 as.
Plucking	"	..	..	1 mound leaves	..	Apr. to Jun. & Nov.	11 to 12 hrs.	Re. 1

the condition that the workers in addition to money wages, obtain plots of land, firewood and grazing for cattle; but there is no fixed principle behind the distribution of plots among the workers, many of whom obtain no land at all, while some can even obtain paddy for six months' family consumption from the garden plots. Such plots carry a nominal rent of 2 as. to Re. 1 per acre. It is estimated that over the entire Surma Valley three-fourths of an acre of rice land is given to each coolie, the production of which may be computed to be from Rs. 18 to 20, representing Re. 1-8 per month per head of the total population. In addition, it is calculated on a conservative estimate, that the value of the cows, goats, buffaloes, pigs, ponies, bullocks, etc. is equivalent to 8 as. per coolie.¹ The area of land obtainable for cultivation within the plantations has become limited, while the planters are anxious not to distribute plots unless they are sure that the workers' families would regularly supply labour to the planters. Outside the plantations, many workers have reclaimed Government land, and their subsistence holdings make it unnecessary for them to work on plantations.

In many gardens preliminary advances are given to the workers through the sardars and on their arrival deductions are regularly made from the earnings; while the workers also obtain weekly advances for their maintenance which are also debited to the workers' accounts. With unscrupulous clerks and accountants working in collusion with the sardars, the possibilities of deception and false accounting increase.

Finally, the calculation of wages is rendered difficult by the employment of workers in gangs under sardars or maistries who receive various rates of commission. Such commission varies according to different plantations in the Dooars; usually it is 1 to 2 as. in the rupee on the earnings of the gangs. But the practice in Assam is to employ sardars on a fixed salary of Rs. 12 to 15 per mensem.

Tables XIV and XV give figures of wages for the plantations in Assam and other areas in 1929.

They make it clear that the average monthly earnings of

1. Royal Commission on Labour in India, Evidence Vol. VI, Part I, p. 27.

TABLE XIV

Area	Period	Men	Women	Children
Assam Valley	Month	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
	..	14 1 5	11 4 2	7 6 1
Surma Valley	Month	10 13 11	8 11 2	5 7 11
The Dooars	Month	14 4 1	10 5 8	2 14 5
Darjeeling and the Terai	Day	0 7 6	0 6 0	0 2 9
Madras Presidency	Day	0 7 0	0 5 0	0 3 0
				or 0 4 0
Coorg	..	Day	0 6 0	0 2 0
				or 0 3 0

TABLE XV
Plantation wages per mensem in 1929, 1936, 1941 and 1942

	Assam Valley			Surma Valley				
		Rs.	As.	Ps.		Rs.	As.	Ps.
1929								
Men	14 1 5		10 3 11		
Women	11 4 2		8 11 2		
Children	7 6 1		5 7 11		
1936								
Men	6 13 2		5 12 11		
Women	5 10 4		4 0 1		
Children	4 0 2		2 13 7		
1941								
Men	8 2 0		5 8 10		
Women	6 8 4		4 12 4		
Children	4 10 11		3 3 5		
1942								
Men	8 11 5		6 15 0		
Women	7 2 10		5 7 1		
Children	5 4 4		2 11 0		

the tea-garden labour in Assam have declined by about half. There are, again, the basti or faltu labourers in the gardens who have their lands to cultivate and work on the garden according to their convenience. Their earnings amount to Rs. 5-15-0, Rs. 5-10-1, and Rs. 3-8-11 for men, women, and children

respectively in the Assam Valley; and Rs. 5-3-6, Rs. 3-9-4, and Rs. 2-11-0 for men, women, and children respectively, in the Surma Valley.

Need of Fixation of Minimum Wages

The elasticity of the piece rates of wages in the gardens, coupled with the preponderance of the aboriginal labour in the plantations which are also isolated from one another, makes this system liable to both fraud and overtime work without proper payment. On the other hand, the depression in the tea industry and the fixation of quotas in the various gardens have led to under-employment and reduction of earnings and constant movement of garden coolies. The low average daily earnings per day or part work day will be evident from the following:

TABLE XVI
Average Daily Earning per day or per part-day worked

	Assam Valley			Surma Valley		
	Rs.	As.	Ps.	Rs.	As.	Ps.
Men	0	5	11	0	5	0
Women	0	5	2	0	4	2
Children	0	3	7	0	2	9

Recently there has been sky-rocketing of prices of the necessities of life, especially in the Assam plantations. In some gardens, especially in Darjeeling, wages had to be increased, while in others arrangements have been made to distribute rice at very cheap rates. In Assam, paddy is sold in the estates at the rates of Rs. 5 to Rs. 9 per maund, the prevailing rates being Rs. 20 to Rs. 30 per maund. While cloth sells in the bazar at Rs 2-8 to Rs. 3, the coolie obtains it from the company at the rates of Re. 1-8 to Rs. 2, and an umbrella selling at Rs. 6 each is given at Rs. 2-8 each. On the whole planters everywhere fight shy of the principle of adjusting wage rates to the movement of index numbers of cost of living. The difficult situation arising from the high cost of living of coolies is being met principally in three ways:

(i) distribution of paddy, cloth and umbrellas at concession rates.

(ii) greater opportunities for ticca earnings.

(iii) drafting of surplus labour to the construction of roads and aerodromes. In 1942 as many as 82,762 persons were employed in these projects.

Any increment of wage rate is persistently combated, fraught as it is, in the view of the planters, with serious risks of labour unrest in the immediate post-war period when production will have to be seriously curtailed.

In several tracts the area under tea is also being converted into paddy lands to meet the high wage bill resulting from the distribution of rice or paddy at concession rates. A survey of earnings and family budgets shows that in many places the worker's family cannot make both ends meet. The average size of the family in Assam varies from 3 to 5, and its earnings in the gardens investigated vary from Rs. 10 to Rs. 16 only. A typical family budget is given below. A worker's family consisting of one adult male worker, two adult women workers and one boy worker has to support besides themselves one adult woman dependent and three children. The weekly earnings of the family are as follows:

TAB!E XVII

One adult male worker ..	Re. 1-14
Two women workers ..	Rs. 2- 8
One boy worker ..	Re. 1- 1
<hr/>	
Total earnings	Rs. 5- 7

On the bazaar day rice (25 seers) was purchased for Rs. 3-9, dal (3 seers) for 6 as., while fish, spices, salt and vegetables were bought for 8 as. The total expenditure for all items amounted to Rs. 6-1. These items included such luxuries as country liquor (11 as.), betel (3 as.), tobacco (2 as.), and bids ($\frac{1}{2}$ anna.) The family incurred a debt of 10 as. in the week to the shop-keeper from whom rice and dal were bought. Dietetic investigations in the Assam tea estates show inadequacy in total calories, animal protein and fat and in calcium and carotene. The heights and weights of the Assam coolie children are much lower as compared with those determined among groups of children of the agricultural class in Barisal and

Dinajpore.¹ Malaria certainly is responsible for the lower physical standards. The incidence of malaria in gardens where there are no anti-malaria schemes is exceedingly high.

It is high time that the recommendations of the Royal Commission on Labour in respect of the fixation of minimum wages should be adopted. Minimum wage rates have been fixed in Ceylon and Malaya, due chiefly to the desire of India to protect the economic interests of those who have emigrated to these regions; while in the West Indies a Royal Commission recently recommended the establishment of statutory Wage Boards in the plantations before the industries could obtain any assistance granted to them by the State. Strikes are also not infrequent in the gardens of Assam, the general demand of the strikers being an increment of the hazira rate to 8 as. per diem for men, 6 as. for women, 3 as. 6 pies for children, 2 days' leave with full pay, sick hazira and increased maternity benefit. The bulk of garden labour in India comes from other Provinces, some of which are very distant from the plantations. The workers speak different languages and are as a rule illiterate, coming as most do from the aboriginal tribes. The lack of cohesion amongst them stands in marked contrast with the solidarity of the employers who have powerful organizations that govern rates in the plantations.

We have already referred to the wage agreement among members of the Indian Tea Association, or the Dooars Planters' Association in Assam and Bengal respectively. There is a tacit understanding among the members of the Association under which a coolie, recruited for a particular garden, cannot obtain entry in another estate, where higher wages and healthier conditions may attract him. Thus the large turn-over of the labour force is represented by repatriation. The total labour force in the tea gardens is now 1,173,934, of whom the actual working population is 570,000. The annual inflow of workers, including dependents, is 30,000 and the annual repatriation represents about half this number. Coolies as they repatriate take back with them their savings that are, however, insignificant, hardly exceeding Rs. 20. The Annual Report of the

1. Wilson and Mitra's surveys of diet and nutrition, Indian Journal of Medical Research, July 1938 and October 1939.

Controller of Emigrant Labour, Assam, gives the figure of Rs. 2.75 lakhs as remitted by postal money orders to their homes by the labourers. This would mean a saving of only 8 as. per head per annum.

Minimum basic hazira rates and additional quotas, according to the types and kinds of operation in the different gardens, and adjustment of wages to the movement of index numbers of prices in the various centres are essential safeguards that should be adopted for the protection of tea garden labour. In return for the material advantages that the industry obtains from Government in the form of fixation of tea export quota, it should at least guarantee to the garden labour minimum living standards.

The method of fixation of the minimum wage rates should be somewhat as follows: a basic rate should be fixed on the basis of half a day's work, or a hazira to be defined as a unit of four hours only, and additional rates also prescribed for extra time of ticca. These rates would vary according to the various tasks in the garden from season to season. Thus hoeing, pruning, and plucking should be paid at different piece rates. Such rates would also have to be adjusted to the skill of workers and the soil, season and other conditions of the garden. The Wage Fixing Board should adjust the rates in such a manner as to ensure living family wages for each working day. A basic minimum rate would, on the one hand, prevent under-employment in the gardens, while a fast worker may be able to increase his or her earnings on the basis of rate fixed for the ticca. In those gardens where the unit system is adopted under which payment is made for each unit work, as when for instance, plucking is undertaken on the basis of one-piece unit payment, and hoeing and pruning on the basis of one-anna unit, the same principle may be equally adopted. The fundamental principle is that the piece rate fixed by the Wage Fixing Board for a particular task should be such as to yield the average worker the statutory amount for a given unit of time, viz. a half day for four hours, in all gardens, and such an additional amount for overtime that the aggregate remuneration may represent living wages for the whole day's work. The basic or hazira rate should be the same for all

adult workers, whether men or women. Since on the plantations the family is the economic unit, the employment of women and children, almost to the same extent as men, decides the popularity of a garden. It is, therefore, necessary that when minimum wages are fixed, the rates should be equal for men and women. Any differences in the capacity of work for men and women will be registered in their respective *ticca* earnings. A basic rate for children should also be fixed and this would be easier, if the starting age for the child worker be increased to be twelve or ten years.

The Wage Fixing Board should prescribe the basic and *ticca* rates. It may be suggested that the basic rate should be fixed at 8 as. for the *hazira* to which additional amounts would accrue to the worker for *ticca* or additional tasks, should he or she desire to increase his or her 'daily' earnings. This would enable an average coolie family of three persons to earn about Rs. 25 per mensem, which at the pre-war level of prices might be considered as the living wage. It may be mentioned that the average coolie family now earns in the Assam Valley about Rs. 16, in the Surma Valley about Rs. 12, and in the Bengal Dooars about Rs. 10.

Conditions of Employment and Wages in the Quarries

The recruitment of quarry workers from distant Provinces, their employment as a rule under contractors, the preponderance of depressed castes and aborigines, and the comparative isolation of quarry life necessitate special protection of quarry workers. Organized unionism has not touched this class of people, while in the distant hill-sides the workmen, owing to the complete grip of contractors, would starve without protest or attempt to abscond.

Hours of work in the quarries are often from 6 a.m. to 6 p.m. Quarry work is undertaken in the open without any shelter under the blazing sun. Boys and girls are admitted for work into the quarries sometimes against the Indian Mines Act, while nursing mothers have been found to break, chip and load stones, keeping their infants in unprotected and unfenced places. Here and there our investigations have shown that infants have lost their lives. Inspection is scarce or inadequate.

quate, and even where there is stone-cutting at a depth of 20 ft. or more which makes the mining regulations operative according to the law, such regulations are not enforced. The daily limit of work in quarries should be reduced by legislation to 8 hours; while no child under the age 14 should be permitted to work in a quarry. In most of the mountain-sides, there is no arrangement for water supply and sanitation. Water is brought by the workers themselves into their working places in lotas. In the case of quarry work the provision of water supply and shelter for workers, and especially for children when their mothers work, should be made, and Acts on the subject should be framed.

The system of wage payment is as follows: Contractors come into agreement with quarrymen, who are brought from Central India, Rajputana, Delhi, the U.P. and Madras, that they would not leave the quarry within a period of six months or a year. The return fare is promised by the contractor if the worker remains in the quarry for 12 months. As a matter of fact, the contractor often finds an opportunity to deprive him of this. Contractors also pay directly to other contractors by way of redemption of advances to the workers which have been left unpaid in order to bring the workers to their own places of work. In this manner, the worker's previous debt is transferred to a new contractor. Further, where the contractor does not find adequate work, the workers remain idle and yet they are not permitted to leave the quarry. In a limestone quarry at Dumarkar near Sasseram, it was found that the contractor could not give work to the quarrymen for about two months, and yet the workers had to remain in the quarry due to indenture since the contractor's advances to the workers were not paid off. Thus there was great unrest in the entire area where there were about 8,000 stone-cutters.

In the first place, the method of recruitment of stone-cutters for quarry work and for road and rail construction should be thoroughly revised and brought in approximation to the method of recruitment of garden labour in Assam. It will be expedient to organize emigration depots at distant recruiting centres in other regions and Provinces, such depots being under the supervision of the local governments and the right

of repatriation after three or five years should be given.

In the second place, there should be standardization of tubs and tub rates. Measures used for estimating the work of stone-cutting and chipping are very crude. Boxes and baskets are used in many places while there are also trolleys and tubs; but overloading of tubs and trolleys is not checked, while under-loading is followed by a drastic reduction of wages.

Wages are some of the lowest in India in the quarries where, on the other hand, conditions of work are strenuous and even hazardous. Take, for instance, the earnings in one of the Sahabad lime-stone quarries. A couple of workers can on an average load four trolleys of lime-stone (mal) and six trolleys for over-head work (patra). For each trolley of mal the labourer gets 13 as. and for each trolley of patra 9 as. Thus the couple would earn Rs. 6-10 in a fortnight. It is a strikingly unfair practice in the quarries that for certain days in the week, usually two days, the workers are engaged only for removing the over-burden, which means two days work in the week without any wages at all. In some quarries as much as one-third of the working days is spent for removal of over-burden without any earnings. In the quarry at Pakur in Bihar, the average earnings were found to be as follows for a family of quarrymen for five hours of work: Adult worker, 3 as., wife, 3 as., a boy or girl, 6 pice. In the quarry at Sheikhpura, the average earnings are 2 to 3 as. for local workers and 3 as. for workers from Rewa. On an average, a quarryman from Rewa would take four days to break, chip and load one trolley of stones and thus his average earning is 3 as. per diem. For the calculation of piece rate wages, trolleys, boxes and baskets measuring the volume of work are adopted. Thus in Pakur a box of stones finely chipped would measure $2\frac{1}{2}$ cubic feet for which $2\frac{1}{2}$ as. are given to women workers. For loading a wagon Rs. 3-12 are paid. But the contractor may employ more than the required number of men, resulting in the reduction of the average earnings for each worker. A basket (tukri) of chipped stones would be paid for at 2 pice each. Where there is drilling, the workers are paid at the rate of 3 to $3\frac{1}{2}$ as. per square foot, the implements being supplied by the contractors. There are also wage deductions by the contractors. At Sheikh-

pura the contractors deduct 1 anna for each trolley load of stones for which the workers obtain 14 as. They plead that this deduction is for the repair of houses and for old debt, but the plea is false. At Sheikhpura the contractors have been known to employ goondas in large numbers in order to intimidate the workers, so that they may not flee to other quarries, while cases are also known of kidnapping of girls of the workers by the contractors and their goondas. In the iron ore mine at Gua in Singhbhum district where the Indian Iron and Steel Company directly employs 900 workers and the contractors about 3,000, the average earning of the worker is only between Re. 1-4 and 1-12 in the week. Wages vary for loading the ore and depend upon the lead and the grade. The rates for loading the tubs vary from $1\frac{1}{2}$ to 3 as. The wage rates of workers under the contractors are, on the whole, lower than the sarkari rates. Besides, the sardars who get the workers from the villages usually obtain $\frac{1}{2}$ to 1 anna from each worker.

Standardization of Tubs and Trolleys

The standardization of tubs, trolleys and baskets is the real remedy. By this alone can we establish uniformity in the volume of stone or coal obtained and the risk of a worker's over-loading for which he is not paid minimized. The standardization of tubs and trolleys is essential for the establishment of basic rates of wages in the quarries. A Wage Fixing Board ought to be established which should go into the varying conditions in each quarry and standardize both tubs and trolleys as well as tub and trolley rates paid to quarrymen.

It may be suggested that the minimum wage in a quarry may be constituted of a basic rate of 5 as. per diem plus piece-wages according to the tub or trolley of stones broken, chipped and loaded. The basic rate is what the worker is assured when he or she enters the quarry, and the piece rate is what he or she earns by actual work. At the lime-stone quarry at Khalari the women workers earn only 2 to 3 as. per diem. The weekly earning is on an average 10 as. at the rate of 1 pice for nine baskets of lime-stone broken and chipped. At the Baulia quarry the minimum wage fixed is 6 as. The drillers at Khalari obtain on an average 5 as. compared with about 7 as. at Baulia.

A driller's weekly earning at Khalari varies on the whole between Re. 1 and 1-3. In the quarries at Gua the wage rate is as follows: 7 basketfuls of stone cut, chipped and loaded by a group of 8 workers in the course of a day's work earn 12 as. Thus the daily earnings are only 1½ anna. Earnings of only 1 anna per diem are also quite usual. The work extends from 6 a.m. to 6 p.m. under no shelter against sun and rain. The basic rate should be uniform in all quarries, but the additional piece rate should vary according to the natural conditions of the quarry.

The Abolition of the Contract System

The standardization of tubs and trolleys and fixation of minimum wages would no doubt contribute a great deal towards minimizing the evils of the employment of labour under contractors. But on the whole these evils are such that the abolition of the contractors and sub-contractors, though not of sardars, is justifiable by all means. Under contractors wages are lower and subjected to reductions on flimsy pretexts, while the hours of work are also longer. For the large majority of women workers in the quarries or metalliferous mines there is no provision for maternity leave. When women take rest due to pregnancy their services are dispensed with; while they cannot go back to their homes since railway fares are not given. The great majority of quarrymen and women are bound hand and foot to the contractors who give them lump sum advances or weekly loans which are redeemed by earnings. Quarrymen are transferred from contractor to contractor along with their debts; but there cannot be any voluntary transfer of workers for the amelioration of their economic conditions. There is a sort of guild or association among the contractors who agree among themselves not to entice each other's labour by offering higher wages. On the other hand, where in the same quarry or mine there is more than one contractor, labour conditions improve. Comparing the labour conditions at Gua under the Indian Iron and Steel Company and Noamundi under the Tata Iron and Steel Company, it is found that whereas in Noamundi there is only one contractor working for the past 10 years and employing about 75 per cent of the labour force,

in Gua there are quite a number of contractors. Competition among the latter has somewhat improved the labour condition. At Noamundi the contractor gives the coolies 2 to 3 as. a day, while the minimum wage under direct management is 5 as. Under the contractors they sometimes work for 12 hours, while work in the night from 2 p.m. to 1 a.m. or to 4 a.m. is also not unknown, drink being supplied lavishly on such occasions.

Mere multiplication of contractors and sub-contractors might only aggravate the labour situation. In the lime-stone quarry at Baulia there is a large number of sub-contractors, about 150 of them working under 34 wholesale contractors. The wholesale contractor gets from the management Re. 1-1 per ton of lime-stone raised, while the sub-contractor obtains 9½ as. per ton. It is he who provides tools, explosives and huts for the workers. Although the management has fixed the wages of women at 6 as. and of men at 7 as., the sub-contractors compel the workers to undertake more basket and trolley loading. Normally the contractor would get 3 as. per trolley but if five trolleys be not loaded by the workers, wages are reduced from 6 and 7 as. to 4 and 5 as. respectively for women and men. Thus work is intensified without any increase of earnings. Some sub-contractors are actually labourers who themselves work with the coolies. Thus the position here somewhat resembles degrees of sub-infeudation, and sub-letting of rights in land that create a large number of intermediaries between the actual tiller of the soil and the State. The presence of a number of contractors and intermediaries in the quarries implies that the latter intercept a large portion of earnings which should properly go to the workers. Difficulties of recruitment and management of labour are put forward as obstacles to the adoption of the sarkari system. But as industry is stabilized the raisings in the quarry or mine become more or less standardized. This gives the management the opportunity to manage directly the quarry work without risks; while such other operations now relegated to contractors as the loading and unloading of coal, raw materials, etc. and cement packing in bags may more easily be taken over. The labour force also is gradually becoming non-migratory. Thus the management should take the primary responsibility for

looking after the interests of the workers, since their discontent arising out of the dealings of contractors and sub-contractors inevitably affects the interests of the industry. The system of employment of labour under contractors in the quarries has become an anachronism and its abolition should be a matter of legislation in the interests of both industry and labour.

But the Government's attitude in respect of the employment of contract labour has been both reactionary and harmful. In the State railway colliery at Bokaro (Bermo, E.I.R.) employing about 6,700 workers the raising contractor's rates have been reduced in the following manner:

TABLE XVIII

Year				Rate per ton of coal
1925	..	..	..	Re. 1-12
1928	..	..	..	Re. 1- 8
1930	..	..	..	Re. 1- 8 to 1-6
1934	..	..	..	As. 10½
1938	..	..	..	As. 7½

Such reduction of rates for the raising contractor has contributed towards the reduction of miners' and loaders' wages. As a matter of fact, the miners' and loaders' wages are the lowest in Bokaro. A minimum fair wage clause safeguarding the earnings of the coal-cutters was introduced into the agreement with the raising contractor in 1937; but this has not prevented the deductions of wages. The average earnings are only Re. 1-4 to 1-8 for a couple (a miner and a loader) per week. Children employed in separating shale from coal obtain only 2½ as. per diem for work which extends from 6 a.m. to 6 p.m. In this quarry there are serious unauthorized deductions. The contractor's rate is 5 as. for coal piled upon the tub plus 3 pies which is given as commission to sardars. Now the contractor compels every miner to fill one extra tub for every ton of coal, the plea being that this extra tub compensates for under-loading. The irregularity in the supply of both tubs and wagons leads to chronic under-employment. Not more than two tubs are usually supplied to a miner and a loader who cannot therefore increase their earnings by more exertion, but at the same time cannot leave the colliery. Contrac-

tors always keep a reserve of labour to meet sudden demands, and accordingly enforced idleness is the rule in these collieries. Co-ordination of the Railway orders of coal from season to season and equal distribution of coal raising and supply of wagons will enable the raising contractor or manager to maintain a smaller but adequately employed labour force in the State collieries. Both agricultural work in summer and the shortage of wagons that are deflected for movement of grains, occurring simultaneously, lead to chronic labour shortage. This is sought to be overcome by inviting more than abundant labour throughout the year to the collieries.

CHAPTER VIII

WAGES IN THE COAL-FIELDS

Difficulty of Ascertaining the Earnings of Individual Miners

In India 350,000 persons are engaged in mining, of whom two-thirds are concentrated in the coal-fields of Bihar, Bengal and Orissa. The examination of the economic condition of the miners will be limited to these eastern coal-fields where investigations have been carried on by the present author. In the coal-fields payment for miners and loaders is made by the stack, tub, car, or trolley of coal cut and loaded. Unless we know the standard size of tubs, tub rates and the average attendance of miners and loaders, we cannot estimate exactly both output and individual earnings per mensem. The loader is as important as the miner, and earnings in the collieries are made jointly. Formerly it was usually the miner's wife, but now a new migrant or unskilled worker works by the side of the coal-cutter and fills the cut coal into the tubs. If the tub rate be 7 as. the miner receives 4 as. and the loader 3 as. out of it. In some coal-fields the system of wage payment is by the gang, headed by the sardar who is sometimes a working and sometimes a non-working contractor. Thus it becomes even more difficult to ascertain the earnings of individual workers. With these limitations in our mind, the average daily earnings of workers of various categories in the different coal-

fields of India reproduced below from the Report of the Chief Inspector of Mines for 1937 should be compared.

TABLE XIX

Average Daily Earnings in the various mines in India, 1936¹

Workers	Coal fields (Jharia)	Mica mines (Bihar)	Iron mines (Bihar)	Manga- nese (C. P.)	Salt (Punjab)
	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
<i>Underground:</i>					
Miners	0 7 6	0 6 0	..	0 6 3	2 3 3
Loaders	0 6 3	..	..	..	..
Skilled					
workers	0 9 9	0 6 9	..	..	0 15 3
Unskilled					
workers	0 6 9	0 4 6	..	0 5 0	0 7 3
Women	0 5 3	..	..	..	0 7 3
<i>Open</i>					
<i>Workings:</i>					
Miners	0 8 0	0 5 0	0 5 0	0 5 3	..
Loaders	0 7 3	..	..	..	..
Skilled					
workers	0 6 6	0 4 9	0 11 0	0 12 0	..
Unskilled					
workers	0 5 0	0 4 0	0 5 0	0 3 2	..
Women	0 4 9	0 3 3	0 3 0	0 3 6	..
<i>Surface:</i>					
Skilled					
workers	0 9 3	0 6 9	0 13 3	0 11 0	1 1 9
Unskilled					
workers	0 5 0	0 4 3	0 4 9	0 4 3	0 8 3
Women	0 4 3	0 3 6	0 3 0	0 3 3	..

Both the size of the tubs and their average number raised by miners or loaders in the week are of the greatest significance in the determination of the miners' weekly earnings. In spite of the recommendations of the Royal Commission on Labour about 15 years ago for securing greater uniformity in the size of tubs and of insuring that wages bear a closer relation to output, there are still found marked variations in the size of tubs in the coal-fields and in the amount of coal loaded into these. Information collected by the Bihar Labour Enquiry Committee showed that out of 52 collieries investigated only

1. Annual Report of the Chief Inspector of Mines in India, 1937, p. 6.

21 collieries were using tubs of one size, while 24 collieries used tubs of two different sizes, 6 used three different sizes and 2 used five different sizes. Tub of 30 and 36 c. ft. capacity are most commonly used. But even the standard load of the common 30 c.ft. tub has been found to vary from 10 to 16 cwt.

The Practice of Over-loading

Such variations in the size and load of tubs lead to over-loading and under-loading which are the fruitful causes of disputes in the coal-fields. Miners' wages are cut for under-loading. Deductions in most of the coal-fields owned by Messrs Bird and Heilgers and Co., are made for loading below the flush line of the tub. Up to a portion of the depth below the flush line one quarter of the rate is deducted; when the deficiency is more than a quarter, half the rate is deducted. In most coal-fields under-loading is ascertained by visual observation although a measure stick is also used here and there. In some coal-fields, as for example, Serampur colliery, Giridih, run by the State Railways' Coal Department, half tub and in some places $\frac{1}{2}$ tub is deducted if the tub be under-loaded below 6 inches. But the penalization seems to be most unjust in the coal-field at Bokaro where the miners are compelled by the raising contractor to fill one extra tub for every ton of coal raised, to allow for under-loading. Thus thousands of miners and loaders are daily deprived of their legitimate earnings.

In many coal-fields this practice of over-loading leads to the accumulation of 'surplus' coal, the aggregate output of coal exceeding the standard tub load multiplied by the number of tubs filled. The income from the surplus coal is distributed among the official and supervisory staff, or is credited to the company's or contractor's account. An investigation conducted by the Bihar Labour Enquiry Committee's investigator, Dr Balraj Seth, has revealed that 36 collieries were making proportionate deductions for under-loading and in 10 collieries $\frac{1}{2}$ to $\frac{1}{2}$ tub was deducted on the mere suspicion of under-loading. The latter were chiefly the collieries running on the contract system. Again, 30 collieries were found to be keeping regular records of surplus coal which varied from 2 to 25 per cent of their total output.

Decline in Miners' Earnings

TABLE XX gives the average monthly earnings of miners and loaders in the Bihar coal-fields. The information is not full but is fairly representative of both large and small collieries. From this statement the average earnings of miners and loaders in the Bihar coal-fields come up to Rs. 11-14-10.

TABLE XX

Colliery	Category and Number of workers	Average Monthly Earnings 1937
		Rs. As. Ps.
Bokaro quarry	.. Miners: 1,341	12 3 0
Jarangdih ..	.. Miners 350, Loaders 67	(16 8 0)M (13 4 0)L 14 14 0
Kargali quarry	.. Miners: 1,170	12 3 0
Kargali underground	.. Miners: 1,310	12 3 0
Loyabad ..	.. Miners and loaders, 1,056	11 8 6
Mudidih ..	.. Miners and loaders, 370	9 1 0
Katras Choitodih	.. Miners and loaders, 482	10 7 0
Standard ..	.. Miners and loaders, 150	11 12 3
Fulanbararee ..	.. Miners and loaders, 319	12 2 0
Saltore ..	.. Miners and loaders, 93	10 4 0
Sendra ..	.. Miners and loaders, 109	10 13 3
Bhagaband ..	.. Miners and loaders, 134	10 7 9
East Indian Coal Company, Miners: 330,		
Bararee ..	.. Loaders: 320	(15 6 0)M (10 12 0)L 13 1 0
East Indian Coal Company,		
Kendwadih ..	Not given	(17 0 0)M (13 0 0)L 15 0 0
Khemji Walji & Co. ..	Miners: 183	13 0 0
Ekra Khas Colliery ..	Miners: 68	13 13 0
Central Kurkend Coal Co.,		
Kusanda ..	.. Miners: 90	(10 0 0)M (10 0 0)L 10 0 0

M=Miner; L=Loader.

From the intensive investigation of wages and expenditure of 1030 families representing all classes of workers in the coal-fields of Bihar, Dr Balraj Seth finds that the monthly earnings

amount to Rs. 11-8-2 per worker and Rs. 17-7-4 per family. This figure closely agrees with the average monthly earnings derived from the data supplied by the chief collieries as given in TABLE XX.

In the following table the average earnings of the chief categories of workers are shown separately:

TABLE XXI
Average Monthly Earnings of Workers in the Coal-fields

	1937			1943			1944		
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
Miners and loaders	10	3	2	14	8	0	17	0	0
Trolleymen	9	2	1	12	0	0	15	0	0
Stone-cutters	9	1	8	12	0	0	15	0	0
Loaders	6	13	7	9	0	0	10	0	0
Earth-cutters	6	6	8	9	0	0	10	0	0
							Including free ration and cash allowance of as. 3		

During the last two decades there has been a marked decline in earnings in the coal-fields. Miners were getting 10 to 12 as. per tub of 14 cwt. during 1921 to 1924. In 1929, when the Royal Commission on Labour visited the Bihar coal-fields, the average rate per tub of coal was about 7 as., the tub being of the above size and the miner and the loader dividing the earnings between them on the basis of 4 as. and 3 as. respectively. It is not easy to obtain figures showing the diminution of the basic tub rate since 1929, but the figures shown in TABLE XXII overleaf, taken from some of the important coal-fields, would be of interest.

On the whole, the tub rates in the Bihar coal-fields began to be reduced since 1929 somewhat as given in TABLE XXIII overleaf.

Rates of 4 as. per tub were also largely prevalent between 1930 and 1935. In 1937 there was an increase of 1 or 2 as. per tub, but this was largely offset by the increase of the capacity of tubs from 14 cwt. to 20 cwt. or even to 22 cwt. The war period saw a sharp rise in the tub rate and the earnings of miners and loaders and of skilled workers of all grades. Miners and loaders were earning about 15 as. per diem (including

TABLE XXII
Variations in Tub Rates in the Jharia Coal-fields

	1929	1931	1933	1935	1937
	As. Ps.	As. Ps.	As. Ps.	As. Ps.	As. Ps.
1. Colliery A. (Not named)					
Tub size:					
36 c. ft.	..	7 0	6 6	6 0	6 6
2. Colliery B. (Not named)					
Tub size:					
36 c. ft.	..	7 0	6 0	..	7 0
30 c. ft.	..	6 0	5 0	..	5 9
3. Colliery C. (Budru chak)	..	7 0	..	..	5 0
4. Colliery D. (Standard)					
Tub size:					
36 c. ft.	..	8 9	..	..	7 0
5. Colliery E. (Saltore),					
Tub size:					
36 c. ft.	..	7 0	6 6	6 0	..
					6 6
					to
					7 6

TABLE XXIII
Average Rates per Tub of Coal cut and loaded at Jharia

	As. Ps.
1929	.. .. .. .. 7 0
1931	.. .. .. .. 6 0
1933	.. .. .. .. 5 0
1937 January	.. .. .. .. 6 6
July	.. .. .. .. 7 6
1944	.. .. .. .. 9 to 12 As.

ration and cash allowance) in 1944. The pump men, engine men and other skilled workers obtained Rs. 25 plus a dearness allowance of Rs. 9 per mensem. The wages of time-rate workers have not been increased to any extent, in spite of the fact that improvement of coal trade was visible since 1935. TABLE XXIV opposite shows the steady decline of earnings of workers in Bihar between 1927 and 1936.

It is evident that in 1936, the earnings of miners were re-

TABLE XXIV

*Decrease in Earnings of Underground Workers in Jharia Coal-fields
(Average Daily Earnings in December)¹*

Year	Miners			Loaders			Skilled workers			Unskilled workers			Women			
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	
1927	..	0	14	3	0	10	9	0	11	9	0	9	9	0	9	8
1930	..	0	13	6	0	10	9	0	12	6	0	9	6	0	8	6
1931	..	0	11	6	0	11	6	0	12	0	0	8	6	0	7	6
1932	..	0	9	9	0	8	6	0	10	9	0	7	0	0	6	6
1933	..	0	8	6	0	7	3	0	10	6	0	7	3	0	5	9
1934	..	0	8	0	0	6	9	0	10	6	0	7	0	0	5	3
1935	..	0	7	9	0	6	3	0	10	3	0	6	9	0	5	0
1936	..	0	7	6	0	6	3	0	9	9	0	6	9	0	5	3
1937	..	0	9	3	0	8	0	0	10	3	0	7	0	0	5	3
1938	..	0	9	6	0	8	3	0	10	9	0	7	6	0	5	3

duced by about one-half and of loaders by about one-third as compared with the earnings in 1927. Similar reductions also took place in the case of skilled labourers and unskilled labourers and especially women, who were excluded from underground work. On the whole, that exclusion reduced the miners' family earnings, and proved economically disadvantageous and socially disruptive. Since 1937 an upward trend of wages had been clearly discernible; while the employment of women underground was permitted first in the coal mines of C.P. and Berar and then in Bihar since 1943, due to the reduction of coal output handicapping war industrial effort. The chief causes of the rise of mining wages are the relative scarcity of labour due to successful harvests and the lure of higher wages in neighbouring areas where roads and aerodromes have been constructed and earth work of various kinds started, and the experience of chronic food shortage in the coal-fields which has led to increased sickness caused by diet deficiency. By 1944 rates of 9 as. to 12 as. per tub were largely adopted in the coal-fields of Jharia and 11 as. to 14 as. in the Rannigunge fields. The average earnings of miners and loaders have increased from about Rs. 10 to Rs. 17 per month in 1944 inclusive of dearness allowance. A dearness allowance of 10 per cent of total

1. Annual Report of the Chief Inspector of Mines in India, for the respective years. After 1939 this Report has been withdrawn from circulation.

earnings was given in 1940 which was increased to 27½ per cent in 1942, and to 50 per cent in December 1943. Besides rations are given at concession rates—6 seers of rice or wheat per rupee and standard cloth at half price. Later on in 1944, free ration was provided—½ seer of rice per diem along with a cash allowance of 3 as. daily. It should be noted in this connexion that the working class cost of living shows the highest trend in India in the coal-fields of Jharia. As compared with August 1939, the cost of living recorded here a peak of above 500 per cent between April and August 1943.¹

Causes of Low Earnings

The following table compiled by the investigation of the Bihar Labour Enquiry Committee shows the distribution of family earnings according to the various income groups in the coal-fields:

TABLE XXV

Income Group	Average monthly Percentage of earning per families family		
	Rs.	As.	Ps.
Rs. 5 and below	2 4 1 10
Rs. 5 to Rs. 10	13.1 2 1 4
Rs. 10 to Rs. 15	30.6 12 4 7
Rs. 15 to Rs. 20	23.4 16 9 4
Rs. 20 to Rs. 30	21.1 24 9 4
Rs. 30 to Rs. 40	7.1 34 11 4
Rs. 40 to Rs. 50	2.8 43 5 6

It may be pointed out in this connexion that the coal-fields which are worked by the raising contractors generally give lower tub rates, and here the average earnings of miners and loaders are smaller. The situation was like this in 1939 when we visited the collieries of Bihar and Bengal. In the colliery at Bokaro the raising contractor receives 7½ as. per ton loaded into wagons and pays 5 as. per tub to the miner plus 3 ps. as commission to the sardar. But habitually there is over-loading

1. "The Eastern Economist".

of tubs to the extent of about 50 per cent. In Kargali the tub rate is 6 as. in both open quarry and underground workings. In Argada the tub rate is only 2 as., the capacity of tub being 30 cubic ft. In Jarangdih the tub rate is $5\frac{1}{2}$ as. and the capacity of the tubs is 30 c.ft. On the whole miners and loaders in the railway collieries are much less fairly treated than in the Jharia coal-fields. Monthly earnings in such collieries go down to Rs. 9 or even 6 for coal-cutter and loader jointly, and are almost on a level with agricultural wages. Near Bokaro agricultural wages are 3 poilas of paddy and two meals in kind and 3 to 4 as. in cash, and the women can earn 1 anna to 2 as. by home work. This matter is worthy of serious consideration, since it is the Railway Board's policy, in regard to the production of coal from the railway collieries, that is held largely responsible for the continued depressed state of the coal industry, which again is largely responsible for lower wages and standards of living of workers in the mines as compared with workmen in other industrial establishments in the country.

The chief causes of low earnings of workers in mines are: (i) low tub rates, (ii) deficiency and irregularity in the supply of tubs, (iii) absenteeism, (iv) overplus of workers due to the seasonal variations in production, and (v) the chaotic character of the coal industry and trade. We have already referred to the low tub rates and how these basic rates were reduced in recent years or the capacity of tubs increased in 1937 when there was a general restoration of the cut that was made in the rates during the depression in 1932.

Shortage and Irregularity in the Supply of Tubs

The deficiency of tubs is chronic in the coal-fields and is a serious handicap for workers, especially in the busy winter months from the end of the year up to April and in the smaller collieries where the provision for travelling roads in the underground up to the working faces and separation of working from haulage roads are inadequate, leading to delay and interruption in the movement of tubs. It is difficult to give exact data in respect of the deficiency of tubs which is a most chronic grievance of workers in the coal-fields. But the following instances are typical:

TABLE XXVI

Colliery	Number of tubs	Number of miners and loaders in the busy season	Number of miners and loaders in the slack season
Colliery A (Not named)	400	750	450
Colliery B (Not named)	216	400	300
Colliery C (Not named)	291	475	300

On an average three standard tubs of 30 c.ft. can be filled by a miner and a loader in a day. Even in the slack season for full employment of the underground workers the collieries need 675 tubs, 450 tubs and 450 tubs respectively, and 450 tubs and 300 and 300 tubs respectively, if we assume a turn-over of 1.50 trips for a tub in a day as at Jamadoba.

The shortage of tubs is even more serious in the Bokaro coal-field where the number of tubs supplied in quarry 3 between 18th February to 24th February, 1939 fluctuated as below:

TABLE XXVII

Saturday	..	..	..	908 $\frac{1}{2}$
Monday	..	..	..	1,487 $\frac{1}{2}$
Tuesday	..	..	..	1,669 $\frac{1}{2}$
..	Wednesday	..	..	1,912 $\frac{1}{2}$
..	Thursday	..	..	1,559 $\frac{1}{2}$
..	Friday	..	..	1,377 $\frac{1}{2}$
				8,915

Tub deficiency is aggravated in the mines in the busy season when more workers are introduced underground than can be fully employed.

On the other hand, miners and loaders would not work unless they have tubs by their side, for if the tubs be not loaded before they leave their working faces their coal may be pilfered by the gang of the next shift or the entire amount of coal may not be credited to them. In some mines the stack of coal raised is marked by the sprinkling of lime, but this it seems hardly engenders confidence among the miners. The remedy, of course, is more tubs and improved organization, so as to enable each tub to be filled more often than at present.

Even in the Jamadoba colliery where there is adequate

organization for good roads and main tram lines, haulage facilities and a good supply of mine cars or tubs which can be taken as near the working faces as possible, it is estimated that a tub has a turn-over of only 1.33 to 1.50 trips per 24 hours as compared with 5 trips for each single shift of 8 hours in Great Britain. Improvement of the turn-over of tubs would largely depend upon an adequate organization of haulage roads, repair and renewal of tubs and tracks and the appointment of an adequate traffic staff. Many collieries grudge the financial investment for an adequate supply of tubs and haulage arrangements, and blame miners for not commencing their raisings unless they obtain their tubs, and holding up their coal until the end of the shift. There is no doubt that the efficient working of a mine implies improvement in the output of coal per worker, and this can be only secured by a proper supply and distribution of tubs even at the cost of a new financial lay-out. This consideration is important as much for the welfare of the workers as for the rationalization of the industry as a whole.

Much can be done, however, under present conditions of working if there be greater vigilance in respect of regulating and eliminating unfair and dilatory practices of over-men, tub checkers and sardars. Corruption is rampant underground. Over-men or sardars are given bribes in order that they may supply tubs regularly. Tub when loaded wait underground in the absence of checking. Munshis are also known to mulct out a portion of the workers' earnings by making false entries of tubs loaded. The following precautionary measures which have been adopted with success in the coal mines under Messrs Bird and Co. should be widely adopted: Every miner is given before he goes underground a ticket which bears an identification number, and which is dropped in the hole at the bottom of the tub before the loading commences and the tub is recorded in favour of the number in the hole. A tub without number is not acceptable. At the counter where payments are made, the miner presents his ticket with his number. There is a pigeon-hole for the corresponding number in which the dues of the workers are kept inside an envelope which is handed over to him on the pay day.

Absenteeism

Absenteeism is also one of the chief causes of low earnings of miners and loaders. Viewing the labour situation in the coal-fields in Bihar and Bengal, we find that on the whole the labour supply falls short of the demand. Thus there is a constant movement of miners, and to a less extent of loaders, from one colliery to another in search of better working conditions and wages. Secondly, absenteeism is also due to the workers, about ninety per cent of whom are agriculturists who cultivate in their village homes, going back to agriculture in the sowing season (July and August) and again in the reaping season (November). Labour attendance is satisfactory from the beginning of September to the middle of October, and again from the middle of December to the middle of June. During the remainder of the year attendance is irregular and unsatisfactory. With the exclusion of women from underground work absenteeism has increased in the coal-fields. Miners keep going home every two or three weeks for a stay of about 7 to 10 days to visit their families, as the majority of their women and children now remain behind in their village homes, instead of coming to the mines. At a rough estimate, no worker spends more than eight or nine months in the coal-field. Not only economic necessity, but social and religious events also call back miners to their villages. Festivals reduce attendance throughout the year, while attendance in April and May is affected due to the marriages. Thirdly, even when resident in the colliery, a considerable proportion of miners do not work on Mondays and Saturdays. It is only on the third, fourth and fifth days of the week that attendance is satisfactory. The Bihar Labour Enquiry Committee's investigator worked out the following rough measure of attendance of miners:

TABLE XXVIII
Attendance per week

Number of days						Percentage of workers
6	..	..	..	..	..	10
5	..	..	..	..	..	45
4	..	..	..	..	..	25
less than 4	..	..	..	..	..	20

On an average the attendance of miners and loaders may be estimated between 4 and 5 days in the week in Jharia, and between 3 and 4 days in other coal-fields. Naturally local miners' attendance is less satisfactory than that of recruited miners, who are lodgers in the dhowrahs. Such laxity of attendance is due as much to the need of recuperation after arduous toil as to improvidence, drinking and gambling in the absence of other cheap and wholesome means of relaxation.

At Jamadoba the improvement of housing conditions, which are some of the best in the Jharia coal-fields, has contributed towards the reduction of turn-over of miners and loaders to only about 15 per cent; while in their other colliery at Malkera-Choitodih the turn-over of these categories of workers still remains at 25 per cent. In many collieries the turn-over may be as high as 50 per cent. Not only better housing accommodation but also better working conditions and wages are calculated to lead to the development of a permanently settled labour force in the collieries. In order to discourage absenteeism, the Tata collieries give a profit sharing bonus to the miners and loaders on the basis of attendance of 190 days in the year. With such improvement the workers will be gradually weaned from their agriculturist outlook and prefer the higher standard of living and amenities of life that the coal towns may offer, to the custom and routine of work and leisure in the villages. So long as the social, economic and especially housing conditions of the miners and loaders, however, remain as at present, labour will migrate to and fro between the collieries and villages. On the other hand, the unsettled and migratory character of the labour force will be an impediment to the development of schemes of housing, social welfare, insurance, and town development on a large scale in the collieries.

The Chaotic Character of Coal Industry and Trade

The excess of miners and loaders introduced underground and the chaotic character of the coal industry are causes of low earnings which may conveniently be treated together. Nowhere is the disorganized character of the coal industry more manifest than in the irregular supply of railway wagons, re-

sulting in sudden outburst of feverish work in the mines, followed by long periods of forced idleness. Managers and especially raising contractors naturally try to meet the situation by keeping in the colliery a large reserve force which is under-employed in normal times. On the other hand, the surplus labour in the dhowrahs clamours for work. It is impossible for managers to refuse to permit workers to enter the mines in larger numbers than may be required for efficient working. Thus everybody's quota of work and earnings is reduced. Workers who are engaged in loading wagons and women who work as surface coolies are the worst victims of short work. On the other hand, it is well known that when the wagons do come to the colliery lines, the loading gang has to toil without interruption. Thus the interval of rest cannot be availed of in practice, since the gangs cannot load the wagons fully in 8 or 9 hours. In the Noamundi iron mine the despatch of ores having much increased, loaders, more than half of whom are women, have to work at night. This is highly objectionable from many points of view. The irregular supply of wagons is generally responsible for the large variations of production in the coal-fields. Such irregularity of working handicaps both industry and labour. Over-head charges increase, while absenteeism and under-employment of labour become chronic and the remuneration of labour is reduced. The causes of low output and earnings obtained by the individual miner in India are rooted not merely in his agricultural inclination and habits, but also in the present disorganization of the coal industry where increase of output has a disastrous effect on prices and an unregulated system of marketing and distribution of coal has brought about results undesirable for the workers.

CHAPTER IX

MINIMUM WAGES FOR MINERS

Comparative Wage Level in Mining and other Industries

In the advanced industrial countries of the world miners' wages are on a par with wages in other organized industrial undertakings. In Great Britain, for instance, the average

earning of all adult underground workers, both skilled and unskilled, is £4 18s. a week and, if avoidable absenteeism were reduced, the figure would materially exceed £5 a week. The average figure in the munitions industries—metal, engineering and shipbuilding—is about £5 11s. but this includes a great deal of overtime.

The following table gives the comparative monthly earnings of workers in the mines, cotton mills and engineering establishments in India.

TABLE XXIX
Average Monthly Earnings, 1937-1938

	Rs.	As.	Ps.
Miners and loaders in Bihar	10	3	2
Weavers in the cotton mills in Bombay	49	9	11
Workers in the engineering industry in Bihar	42	0	0

It is evident that wages in the mines are less than one-fourth of wages of textile operatives and workers in the engineering industry. The gulf is so wide because managers and contractors in the collieries have taken advantage of the presence of a large mass of small aboriginal tenants and agricultural labourers, and their low standard of living in Bihar and Chota Nagpur. As a matter of fact, when the mines were started in the jungles, workers were attracted at first by the payment of even about 8 as. per diem. For instance, when the Noamundi iron mine first started working, unskilled workers were paid 7 to 8 as. But gradually this rate was reduced to 3 or 4 as. In 1935, the General Manager of the Tata Iron and Steel Co. found out on an enquiry that the average wages of labourers at one of their mines dropped to 9 pies per day. For the aboriginals who live back on the hills, many of whom live on top of the ore properties which the Tatas do not own and whose ancestors have lived there for centuries, he pleaded that they should get a living wage even if the cost of mining ores goes up by a small amount. But, as a matter of fact, by adopting the contract system the Tata establishment has reduced the cost of mining ore from 14 as. to 7 as. per ton, with a disastrous effect on wages. It is now found that in this mine an adult worker earns on an average only 12 as. per week and

about 2 to 3 as. per diem. The agricultural wage in this region is about 2 to 4 as., or 3 seers of rice, but agricultural work is not available throughout the year. On the other hand, the supply of labour in the mine is the most unsatisfactory in the sowing and the harvesting seasons.

No doubt, mining work is irksome and hazardous and its level of wages should bear no comparison with what agricultural conditions, population pressure and the presence of a large floating landless class bring about in the villages.

Principles of Minimum Wage Fixation

Under conditions where the industry is tempted to exploit labour ruthlessly and short-sightedly due to the preponderance of simple-minded and ignorant aborigines, the recruitment of labour from different regions and provinces and speaking different tongues, thereby making their solidarity difficult to achieve, and the isolation of the mines, wage rates have to be safeguarded by legislation. There are two broad considerations which enter into the determination of minimum wage rates in modern countries. One basic consideration is that every normal worker shall be paid a wage which is adequate to 'promote health, efficiency, and general well-being', to use the phrase of the Fair Labour Standards Act of 1938, U.S.A., and to enable him to maintain himself and his family in accordance with such standard of living as may be reasonable in relation to the nature of his occupation. There are, therefore, minimum rates below which the wage ought not to be allowed to fall. The second consideration is that workers should be paid at rates, more or less equivalent to the rates offered to workers in comparable occupations. Thirdly, the rates should be such as what the conditions of the trade or industry permit to pay to the workers.¹ These considerations are, to some extent, interdependent. The human needs of labour cannot be interpreted without reference to national income and to customary earnings that are related to the economic wages of the industry.² Thus practical considerations in respect of the economic position of the industry, costs of production, output and profits as

1. "The Minimum Wage, An International Survey", p. 131

2. Pigou: "Essays in Applied Economics", p. 64

well as national income per capita inevitably enter into the determination of the normal and reasonable needs of workers by wage-fixing bodies. Even so a living wage standard is explicitly adopted in order to stress the social responsibilities of an industry. A living wage which secures not merely the full human needs of labour but also the conditions of efficiency and comfort in relation to the particular occupation or industry, improves the output per worker and benefits industry in the long run. On the other hand, sub-marginal industrial undertakings which cannot afford to pay living wages to the workers have no right to exist; and the sooner these are forced out of the field, the more surely the standards of decent living and working conditions establish themselves in the country. The above criteria are especially relevant in the mining industry. Arduous and hazardous jobs like those of miners and loaders should obtain wages that must avoid the reproach of 'sweating', i.e. wages on which the worker can maintain himself and his family on a scale which should be higher than that of agricultural workers living from hand to mouth in the villages. Small and ill-managed collieries which cannot bear the burden of a minimum living wage should form combines and improve their mechanical equipment so that they may be able to support the higher, socially desirable wage rates.

Three decades ago the Coal Mines (Minimum Wage) Act of 1912 was passed in Great Britain. It applies to underground workers (male) employed in coal mines (including mines of stratified iron stone), subject to the exclusion of a few workers. It provides for the fixing of a guaranteed minimum time wage, the purpose of which is to provide a safeguard for piece workers operating in abnormal places where the extraction of coal is difficult. Recently the Mine-workers' Federation in Great Britain has put forward the claim to a guaranteed minimum weekly wage £4 5s.

Division of Minimum Wage into Basic and Additional Piece Rates

In the coal-fields of Bihar the family budget investigation, conducted in connexion with the Bihar Labour Enquiry, has shown the average worker's family to be consisting of 3.4 per-

sons, the cost of whose minimum amount of food, clothing and other requirements has been estimated according to the pre-war level of prices in the collieries at about Rs. 24. This estimate is about the same as that of Mr M. D. Singh, representative of the workers of Jharia coal-field, who calculates the normal and reasonable expenditure of a working class family in Jharia at Rs. 25 per month. Rs. 24 should be considered the living wage for miners and loaders. Thus this living wage (Rs. 24) should be secured by fixing a tub rate which will enable a miner and loader of average skill and industry under average working conditions and full number of days and hours allowed by law to earn Rs. 32 and Rs. 24 per month respectively. A Mining Wage Fixing Board, consisting of an equal number of employers and workers and an official chairman, should determine the minimum wages with sub-committees to work out regional piece-work rates. The minimum wages should be fixed somewhat as follows: a basic rate of 12 as. per standard tub of 30 c. ft. of coal raised and loaded will automatically be credited to every worker who goes underground. This will safeguard miners and loaders against irregular supply of tubs, presence of stone or shale, mechanical break-downs, and other circumstances which prevent them from securing adequate earnings. In addition to the basic rate of as. 12, there should be a piece rate, which will enable miners and loaders to obtain the rest of their earnings by extra labour, and at the same time provide a safeguard for workers operating in difficult working conditions, such as the presence of water, long lead for loading, steepness of the seam, hardness of the coal and temperature of the workings. In several collieries in Bihar extra remuneration is paid over and above the basic tub rates for distance and difficulty of working faces, long lead, or other handicaps. But the practice is by no means universal, and it is essential that there should be legal protection of underground workers so that their earnings may not fall short from causes outside their control. The splitting up of the minimum statutory wage for the miners into basic and additional piece rates will secure the objectives, first, that the living wage is guaranteed to all workers, and, secondly, that earnings are regulated according to

the difficulties of particular jobs for all categories of piece-workers. The latter include, besides the miners and loaders, drillers, masons, earth-diggers, stone-cutters, trammers, main-drivers, miners' and trolley-men's sardars and even haulage-drivers and machine-drivers. At Jharia the cost of living index has risen to 250. But the miners' and loaders' average earnings have increased from about Rs. 10 in 1937 to only Rs. 17 in 1944.

Introduction of Check Weighment

Other statutory provisions are necessary to safeguard miners and loaders against inadequate remuneration for work underground. In coal-fields deductions are often made if the coal be not loaded in the tub up to a level fixed more or less arbitrarily by the sardar, raising contractor or manager, and the deduction may exceed the amount justified by the under-loading. Similarly, where there are any stone and shale in the tub, the tub runs the risk of being rejected altogether, although badly lighted working faces make it difficult for the miners to distinguish between coal and shale. One of the methods by which under-loading, which is the common abuse in the collieries, can be eliminated is the introduction of a system of check weighing. In Japan weighment is the general rule, while no deductions are permitted for rubbish which does not exceed 5 per cent. Additional remuneration is also given when the tub is loaded beyond the standard level. Such regulations are necessary for safeguarding the workers' fair remuneration, and these may be framed by the Mining Wage Fixing Board which should also determine the area over which the basic tub and piece rates as well as regulations would apply.

Finally, the Payment of Wages Act should forthwith be introduced in all mines. This would eliminate such abuses as deferred payment of wages, and unfair deductions for late attendance, breaking of tools and idleness or sleeping underground.

Regulation of Coal Output and Prices

Neither a guarantee of living wages nor an improvement of wages are possible without the rationalization of the coal

industry in the country. In all other countries of the world unrestricted competition has been generally abandoned so far as power and fuel industries are concerned, and public control over both production and distribution of coal has been tightening. In the coal industry in India there have been attempts among the employers to come to agreements not to sell coal at uneconomic prices. But such pledges have not been adhered to, with the result that coal is sold in some cases at unreasonably low and even unremunerative prices, so that the wages level has remained low or has actually declined. There has also been unregulated increase of coal production without reference to accumulated stocks and market conditions. The managing agency system which is prevalent in the coal industry has also discouraged the development of a policy of regulation of coal output and sale since it controls the larger collieries in the country, and obtains for its remuneration a fixed proportion of the total receipts or the net profits or a commission on tonnage basis. All this naturally reacts upon the speed of exhaustion of higher grades of coal which, it is estimated, will not last for more than 60 years. In 1937 there was a record output of 27 million tons of coal. In 1940 the output was 25 million tons, and at the end of the year there were 2 million tons of coal in stock. The price of coal recovered in some measure in 1936. But again it declined to Rs. 2-12 per ton which is just a little above the rock bottom price of Rs. 2-8 in 1935. Such decline of the price of coal makes it difficult for the industry to pay higher wages. Especially is it difficult for the smaller collieries, which produce coal of inferior grades, to cope with the situation. Since their financial resources are limited, they cannot wait for improvement of market conditions, but are compelled to sell out coal at uneconomical prices. The Chief Inspector of Mines in India in his written evidence to the Bihar Labour Enquiry Committee observes: 'It is deplorable that as a result of the prices being cut down in open competition some mines actually work at a loss in order to obtain a particular contract. In some instances an increase by a few annas would make an appreciable difference to the economical working of a colliery and would be a negligible addition to the total cost of the coal to the consumer. How can

such mine-owners pay satisfactory wages to employees when such a competitive policy is adopted? It appears to be the practice that in the event of any economy measure the employee is the first to get the cut.¹ On the other hand, small and middle-sized collieries cannot pool themselves into a larger combine or syndicate which might have facilitated the introduction of mechanical equipment and the improvement of both working conditions and financial strength. Nor have these been able to co-operate with the larger collieries. Concerted action is rendered peculiarly difficult due to considerations of race and prestige dominating influential European and Indian groups of colliery owners and managers. The case is, indeed, very strong for the Government to regulate and maintain the selling price of coal at an economical figure and abolish the present cut-throat competition which prevents the industry from paying adequate wages to the workers. Far from adopting a policy of control of output and distribution of coal, the Government of India through the Railway Board have in some measure aggravated the evils of laissez-faire and unrestricted competition. The railways own and manage large collieries, and since the state collieries cannot meet their full demand, they sometimes buy coal in the open market and shatter prices and at the same time speed up production in their own collieries to bring down the market price of coal. As long as there are no restrictions of output nor minimum prices of coal, not only will the collieries be tempted to exhaust the limited reserves of metallurgical coal by risky and wasteful methods and thus jeopardize the future industrial status of the country, but they will also pay unreasonably or ridiculously low wages to workers, to the detriment of the health and efficiency of both the present and future generations of workers. In Great Britain, Government ownership of mines, control of the mining industry through the National Coal Board, and subsidy to colliery owners are contemplated with a view to safeguarding minimum wages to miners and loaders. In India at least the regulation of output and fixation of prices of coal by Government in the absence of agreement or co-operation in the in-

1. Report of the Bihar Labour Enquiry Committee, Vol. III, Part A, p. 27.

dustry itself are necessary in order that the coal industry as a whole may be able to bear a minimum wage which approximates to the subsistence level of the workers. During the war the Government first established a system of control of the supply and distribution of coal, with a view to granting priorities to industries engaged in essential war productions and then fixed from June 1944 the prices of all grades of coal at the pit head of each colliery, taking over complete control of despatch of the commodity from collieries. Such control should be continued and effectively implemented for post-war planning of the coal industry.

Unfortunately this system of control is not at all utilized for the establishment of a wage-floor in the mining industry linked with the output and price of coal as in other industrial countries. According to a reliable estimate the present labour cost comes up to Re. 1.4 per ton of coal raised and despatched. Now that the price of coal has been fixed by Government at Rs. 10.8 per ton, the margin is wide enough for establishing minimum wages for the mining industry; that will stabilize the labour force in the coal-fields and improve the average output per miner. In advanced industrial countries the proportion the miners' wage bears to the price of coal per ton at the pit head varies from 40 to 60 per cent as compared with only 12 per cent in India. In Great Britain this proportion is 50, the price of coal per ton being 37s. as compared with the labour cost of 18s. In Japan the proportion works out at 38 per cent, the price of a ton of coal being 7.5 yens, while the labour cost is 2.9 yens. A system of governmental regulation of a basic industry that disregards the obligation to provide for the minimum human needs of labour must be considered an anachronism. Yet one hears now and then in the coal-fields about the conscription of miners and loaders whose earnings are some of the lowest in India, incompatible with the maintenance even of the aboriginal living standards.

CHAPTER X

WAGES IN THE TEXTILE INDUSTRY

Disparity of Earnings in the Textile Industry in Different Centres

The wage system in the textile mills of India illustrates at once archaic and inchoate features which by no means show a tendency to disappear in certain textile centres, as well as modern trends in other centres that will assimilate it to the structures of wages of industrial countries in the West. The textile industry is one of the oldest and well-established industries in the country, employing as many as 967,390 workers, representing about 50 per cent of the total number of operatives in the perennial factories of the country. Yet there is no industry where the earnings of workers vary more from centre to centre and in jobs and occupations in the same centre. There are not even standard designations for the various categories of workers, and thus the nature of the tasks entrusted to workers having the same designation often varies. The highest earnings in the textile industry are obtained at Ahmedabad and Bombay where weavers earn respectively Rs. 52-1-8 and Rs. 49-9-11, and ring spinning tenters Rs. 27-10-3 and Rs. 17-9-11 respectively. These wages are more than three times those in Coimbatore and Madura, where nevertheless the industry has made rapid progress during the last decade. In one of the newest cotton mills of India, viz. Gaya Cotton and Jute Mills in Bihar started in 1937, with 10,000 spindles and 200 looms and with 1,400 operatives, wages given are even on a much lower scale. The following comparison will show this:

TABLE XXX
*Monthly Earnings at Coimbatore, Madura, Cawnpore and Gaya,
1936-1938*

Occupation	Coimbatore	Madura	Cawnpore	Gaya
	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
Blow room scutcher	10 5 4	15 2 9	18 3 0	8 8 0
Slubber	.. 16 13 0	22 15 11	30 12 0	8 0 0
Spinner	.. 15 7 9	14 2 3	20 1 0	7 0 0
Winder	.. 8 7 6	11 3 9	20 6 0	7 8 0
Weaver	.. 15 11 4	29 4 0	36 15 0	22 0 0

Textile workers' wages are some of the lowest in Madras, Bengal, C.P., and in some States of Central India. Spinners obtain Rs. 10 to Rs. 15 and weavers about Rs. 15, in striking contrast with the earnings in Western India.

The causes of such low earnings are the same everywhere. Wage rates are fixed according to the supply and demand of labour, and organized industry everywhere takes advantage of agricultural unemployment and the unlimited influx of labour to push down the industrial wage to the level of the wage for agricultural workers. Where agricultural wages stand at 2 to 3 as. a day, it is no wonder that slightly higher earnings in the factories attract workers in large numbers from the countryside. Besides, in the rural areas employment is seasonal. Thus they weigh the advantage of stability of industrial employment much higher than its accompanying disadvantages of unremitting toil, unhealthy conditions, bad housing and high rents in the industrial centres.

If an unlimited supply of labour has contributed to reduce the wage level in the less industrialized provinces and regions of the country, there has been no attempt on the part of the managements either to train skilled labour or to produce fine varieties of cotton goods that may bear higher earnings for the workers. In Ahmedabad, Madras, and Madura and to a less extent in Bombay, the manufacture of superior woven cotton goods has laid the foundations of a stable and prosperous industry. In the textile mills of the Central Provinces, the U.P., Bengal, and the Punjab generally the bulk of the production continues to be that of yarns and coarser cloths. There is of course the natural economic handicap that for the production of fine cloth goods it is necessary to import long staple cotton, of which the cost is much greater in the up-country than in the coastal provinces. These factors as well as the special advantages of the Bombay Presidency which has had a much earlier start in respect of more skilled labour force and greater efficiency of machinery, better working conditions and industrial administration, explain much of the disparity between the wage levels between the Bombay Presidency and the rest of India. In many cotton mills outside the Bombay Presidency the weavers usually cannot mind two looms, and their output is

much smaller than that of Bombay and Ahmedabad mills, where especially two to four or even more looms are the usual rule. 'In most textile mills in India,' Harold Butler observes, 'the rule is one loom per weaver as against four, six or eight in Europe, though the quality of material used is sometimes inferior to that provided in European factories. Mills exist in Ahmedabad and Bombay, however, where weavers mind two, four or even six looms. In such cases, wages are higher and hours are shorter, but the managements energetically rejected the allegation frequently made in some quarters that workers were indifferent to higher wages or preferred longer hours at a slower pace. In another mill the management claimed that they were obtaining 85 per cent of the average individual output in their Lancashire mills, but they were paying wages in excess of the usual Indian rates and only engaged educated workers. In an Indian-owned mill where similar conditions were given, the standard of efficiency was said to be much above the average.'¹

Thus even when manufacturing operations are not limited to the production of yarns only, as it has been largely the case at the beginning in Bengal, Bihar and the Central Provinces and elsewhere, the lack of skill of the operatives accounts for lower output and hence smaller earnings than in Western India. In industrially backward regions a higher rate of absenteeism also contributes to a lower rate of output per worker and hence lower earnings. The C.P. and Berar Textile Labour Enquiry Committee have recently observed that on a calculation of percentage absenteeism on the same basis and allowing for compulsory leave and factors not directly discouraging absenteeism, the average absenteeism in the C.P. and Berar is probably 13 to 15 per cent as compared with 9.5 per cent in Bombay city at present. In many textile centres there is also an unnecessarily large surplus labour force which can be reduced. In the reeling departments of cotton mills in the C.P. and Berar, for instance, the surplus number of women employees is large and the number can be reduced by more intensive employment. This is also the case in the U.P., Bengal, and elsewhere. There is no doubt that the mainte-

1. "Problems of Industry in the East," p. 23.

nance and growth of such surplus labour force contribute to depress the general wage-standard of such provinces. The gradual absorption of surplus labour, elimination of absenteeism which is synonymous with surplus labour, and the increase of the proportion of permanent as contrasted with the badli or substitute workers, will improve the industrial efficiency and earnings of the textile workers. Finally, greater absenteeism, lower level of skill and efficiency, and lower cost and standard of living go together in new textile towns and villages where the presence of a large floating agricultural labour population and low level of agricultural wages offer inducements to industrial development.

Thus differences in the level of agricultural wages, in the standard of living, skill, efficiency, and regularity of the workers, and in rationalization and industrial administration, all play their role in accounting for and maintaining the extraordinary variations of wages in the cotton textile industry, with the textile centres in Western India at the top showing the highest earnings, and the centres in Madras, Bengal, Bihar and other industrially backward areas showing the lowest earnings.

Table XXXI will illustrate this:

TABLE XXXI
*Comparative Monthly Earnings of Textile Workers in
Different Centres, 1936-1938*

Important centres		Ring spinning tenters	Frame tenters	Weavers (2 looms)
		Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
Bombay	..	27 9 11	36 12 0	49 9 11
Ahmedabad	..	27 10 3	32 10 9	52 1 8
Sholapur	..	19 10 8	22 5 0	43 6 6
Baroda State	..	18 0 0	21 0 0	34 4 2
Indore State	..	16 0 0	23 0 0	41 0 0
Ujjain (Gwalior)	..	13 8 0	14 8 0	32 0 0
Nagpur	..	15 0 6	18 3 4	31 3 2
Madras	..	17 9 4	27 6 6	32 12 4
Madura	..	11 10 6	20 13 9	29 4 0
Coinbatore	..	11 9 8	14 10 9	15 11 4
Cawnpore	..	20 0 0	25 8 3	37 0 0
Calcutta	..	15 0 0	20 0 0	35 0 0
Delhi	..	20 0 0	25 0 0	35 0 0
Lahore	..	20 0 0	22 0 0	32 0 0

The proportion of the labour cost of production is also the highest in Ahmedabad and Bombay. This is shown in the following table derived from the Report of the Tariff Board, 1937 :

TABLE XXXII
Comparative Labour Costs of Various Textile Centres

Centre	Percentage
Ahmedabad	53.8
Baroda	52.65
Bombay	49.40
Calcutta	42.40
Cawnpore	40.75
Nagpur	38.60

Not merely are there wide variations in the levels of earnings in the different textile centres of India but in the same centre there have been marked extraordinary fluctuations of earnings, chiefly due to the absence of collective bargaining among the workers, and of cohesion among the employers. The latter has diminished the industry's powers of resistance to economic blizzards.

Causes of Diminution of Earnings

Faced with the economic depression, the textile industry introduced severe wage cuts in 1923, 1926, 1927, and 1935 in the Bombay Presidency where over two-thirds of the operatives of British India are employed. Many cotton mills also closed down and the economic condition of the workers seriously deteriorated. Tables XXXIII and XXXIV show the decrease in daily earnings of cotton mill workers in different occupations in both Bombay and Ahmedabad, the total decrease being 25.40 per cent and 8.40 per cent respectively in 1937 as compared with 1926.

TABLE XXXIII
Reduction of Daily Earnings of Cotton Mills in Bombay City

Occupations		Rs. As. Ps.	Percentage decrease
			Average daily earnings in July 1937 as compared with July 1926
Drawing Tenters	..	0 15 11	2.98
Slubbing Tenters	..	1 1 0	23.60
Inter Tenters	..	0 15 6	4.39
Roving Tenters	..	0 4 10	24.58
Ring siders	..	0 13 8	15.46
Tarwallas	..	0 12 11	13.89
Doffers	..	0 10 5	13.79
Weavers—2 looms	..	1 5 8	26.14
Winders, grey	..	0 9 11	15.60
Winders, coloured	..	0 12 8	15.08
Reelers	..	0 8 11	18.32
Weighted average	..	0 15 5	25.40

TABLE XXXIV
Reduction of Daily Earnings of Cotton Mills in Ahmedabad

Occupations		Average daily earnings in July 1937	Percentage in-crease (+) or decrease (-) in
			July 1937 as com-pared with May 1926
Drawing Tenters	..	0 15 11	+ 7.73
Do.	..	0 15 9	+ 0.53
Slubbing Tenters	..	1 2 5	- 9.05
Do.	..	1 1 5	-13.28
Roving Tenters	..	0 15 7	- 4.59
Do.	..	0 15 8	- 1.05
Siders (Single side)	..	0 15 6	+ 2.20
Siders (Two sides)	..	1 5 10	- 4.38
Doffers (Ring & frame)	..	0 10 7	+ 0.79
Winders Grey	..	0 9 11	-33.15
Do.	..	0 8 5	-28.37
Winders colours	..	0 11 4	-37.90
Do.	..	0 10 3	-29.31
Reelers	..	0 11 6	-23.33
Do.	..	0 11 6	-14.04
Weavers—2 looms	..	1 8 11	-15.30
Do. —3 "	..	2 1 8	-12.99
Do. —4 "	..	2 4 7	-32.67
Weighted average	..	1 3 1	- 8.40

Minimum Wages in Bombay

It was in the midst of the depression and unsettlement in the cotton textile industry when factories were shutting down and workers were seeking employment under any terms, which individual mills were too willing to accept, that the Millowners' Association in Bombay formulated the minimum wage schedule. It is interesting to note in this connexion that in the West it was the Great Depression after 1929, which promoted the minimum wage programme; for it became increasingly apparent that even in well-established industries, wages were reduced to unduly low level and there was keen competition between the employers with regard to wages which was especially aggravated to the detriment of labour where the trade union movement was not strong enough. The I.L.O. Year Book for 1936-1937 thus describes the significance of the minimum wage-fixing machinery in different countries in the period of economic recovery following the Great Depression. 'It is a point worthy of note that the development of minimum wage-fixing machinery has continued with unabated vigour during the period of economic recovery. When the depression was at its worst, and the pressure for wage reductions most severe, the need for such legislation as a measure of protection for unorganized or weakly organized workers was clearly demonstrated. As conditions improved, the danger of cut-throat competition at the expense of wage rates was lessened, but the continued development of minimum wage-fixing machinery is evidence of a recognition that this danger is never entirely absent, and that such machinery forms a necessary part of the normal mechanism of economic control.'

The evolution of the minimum wage schedule in Bombay has similarly been synchronous with partial economic recovery and it had a salutary, steadyng effect during the year 1934-1935, in spite of the wage reductions in 1935 which were, however, offset by the reduction of hours of work from ten to nine with effect from January 1935.

The minimum wage schedule of the Millowners' Association, Bombay, applies to certain non-rationalized time-rated occupations, and the total number of persons included in the scheme comprises more than half of the total number of

workers employed in the industry. Workers engaged in piece-work occupations are not, however, similarly protected. With reference to the most important and predominant class of piece-workers, viz. the weavers, the Millowners' Association, Bombay, has laid down a standard like Rs. 35 a month, below which earnings would be considered by it to be unduly low. In 1942 this minimum was raised to Rs. 37 a month for two-loom weavers for 26 days of work in Bombay City. The cost of living index rose in this city from 106 in 1939 to 157 in 1942 (1934=100). Under such circumstances the Association would ordinarily institute enquiries into the weaving rates of any mill, which is a member of the Association, in order to level these up. The Association is, however, concerned in these cases with basic rates and average earnings in the weaving department and not with the earnings of individual workers who are guaranteed a minimum wage in the case of the time-rated occupations under the minimum wage schedule. Other classes of piece-workers do not come into the scheme at all. It must, however, be pointed out that the minimum wage schedule does not bind a few non-member mills in the city of Bombay, where the earnings of the workers are considerably below the average wages paid in member mills. During the course of the war, to offset the rise in the cost of living, dearness allowance and war bonuses have been given from time to time in Bombay, Ahmedabad and other cities, the basic wage rates usually remaining the same. While the index number of the cost of living stood at 230 in Bombay City in 1943, it may be estimated that the average spinner and weaver were obtaining Rs. 46 and Rs. 84 respectively as compared with Rs. 18 and Rs. 50 in the pre-war period. For all occupations in the textile industry in Bombay City, the average monthly earnings of adult operatives for 26 working days and the cost of living rose as follows since 1939 : -

TABLE XXXV

Year	Rs.	As.	Ps.	Cost of Living Index	
				Numbers (1934 = 100)	
1939	32	6	5		106
1940	35	0	0		112
1941	36	1	1		122
1942	44	1	7		157

The cost of living sky-rocketed, while wages did not rise proportionately.

The following table shows the improvement of earnings in the various important categories in the textile industry in Bombay City, between March 1938 and March 1942.

TABLE XXXVI
Broach Cotton Textile Mills

Categories	Earnings in March 1938	Earnings in March 1942	Bombay Tex- tile Labour Enquiry Committee
Mixing and Blowroom	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
Tenters ..	15 10 0	18 0 0	18 1 0
Carding Jobber ..	69 0 0	75 0 0	73 5 0
Frame Jobber ..	36 2 3	45 0 0	39 0 0
Doffers ..	9 9 0	11 4 0	11 6 0
Fitters ..	30 0 0	..	45 0 0
Doff Carriers ..	17 0 0	18 0 0	19 10 6
Doffer boys ..	9 9 0	11 4 0	11 6 0
Doubling Piecers ..	17 0 0	20 0 0	19 10 6
Reeling Patlani ..	22 0 0	22 0 0	25 7 0
Winding Jobber (Colour) ..	15 0 0	16 0 0	17 5 6
Winders (Universal) ..	0 6 0	0 6 0	11 10 0
Winders (Grey) ..	10 6 3	11 13 0	13 1 0
Creelers ..	15 12 0	15 12 0	18 4 0
Beam Repairer ..	17 8 0	19 8 0	20 5 0
Drawing-in Jobber ..	34 0 0	34 0 0	38 4 0
Drawers-in ..	16 4 0	17 3 0	18 13 0
Calenderman ..	16 14 0	18 0 0	19 8 0
Folding Jobber (Grey)	35 0 0	35 0 0	38 4 6
	per day	per day	per day
Bobbin Carriers ..	0 7 9	0 8 3	0 9 3
Reelers ..	0 8 0	0 8 0	0 9 3
	for weft and doubling and	for weft and doubling and	for weft and doubling and
	0 7 3	0 7 3	0 8 6
	for warp per 100 knots.	for warp per 100 knots.	for warp per 100 knots.

Need of Standardization of Jobs and Wage Rates

We have already referred to the wide disparity of wage rates and earnings in different mills in different parts of India

and in the different mills in the same textile centre. Such disparities in wage rates arise, of course, from the differences in the quality of the woven goods, working conditions, and types of machinery, requiring different degrees of skill and efficiency of the workers and general economic conditions. But in the textile mills of India such disparities are too large to be accounted for by all these factors. Thus labourers run from one establishment to another without notice. Industrial efficiency could have been more easily acquired if particular workers would stick to jobs in the same establishment for long. Labourers in different establishments in the same industrial centre and belonging to the same category also cannot easily combine because of differences in wage rates. On the other hand, employers who cannot be sure of the permanence of their labour force are apt to neglect their moral responsibility to the workers, and to come in competition and conflict with fellow-employers.

It appears that the textile mills have not made any attempt to regulate the remuneration of different groups of workers according to any fixed principles correlating earnings in the different occupations in an establishment. We would illustrate this from the wage policy of three different centres, viz. Ahmedabad, Nagpur and Cawnpore. With reference to the wages of the weavers in Ahmedabad, the Textile Labour Association in Ahmedabad remarks as follows: 'The dangerous propensities of the lack of standard can be visualized from the fact that 50 thousand looms of sizes from 28S. to 72S. are manufacturing hundreds of sorts of plain and fancy with grey and coloured yarn, further complicated by the use of different counts of yarn. Each new sort with varying texture would require entirely new rates for the purpose of calculating wages. Different mills have different rates for similar sorts and even different methods of calculation. We have found that in fixing rates the employers rarely took into consideration either the specification of the cloth, the skill required, or the strain involved in the process of weaving. The only consideration which weighed with them was how best to give lowest rates. The above mentioned conditions brought about the chaos followed by industrial disturbances which were unparalleled

during the last seven years.¹

Regarding the wage rates of piece-workers in Nagpur, the Council of Action of the Textile Union comments in the same vein: 'The numbers of the cloths in the weaving department change more quickly than the passing clouds in the sky and, with every slight change in the character of the cloth, there is a change for the worse in the rates. How these basic rates for the piece workers and more especially for the weavers are fixed and changed from day to day is a mystery which no human mind howsoever clever and ingenious it may be can unravel, but the net result of all these constant variations in the character of the cloths and the rates is such that in substance and in effect it amounts to a reduction in rates of the piece workers and more especially of the weavers. In the case of daily and monthly wage earners, especially in the Empress Mills at Nagpur, the scale of the wages before 1933 has not been maintained afterwards and has appreciably fallen down.'²

In Cawnpore as well there are discernible wide divergences both in regard to the nature of work entrusted to an operative and his earnings in the different mills in the city. Table XXXVII derived from the Report of the Cawnpore Labour Enquiry Committee gives the data supplied by the various mills for four important occupations in which a large number of workers are employed :

Where workers are uncertain about their rates of remuneration and where these differ from mill to mill, there cannot be any peace in industry. As a matter of fact many disputes in the textile industry arise because of differences in wage rates for the same or similar jobs in different establishments in the same centre; while due to the difficulty, nay, the impossibility of obtaining comparable figures of wages with a common denominator, labour organizations and employers do not have a common ground for negotiation and settlement. Where comparison and verification of wages and wage rates are difficult, angry recrimination and rejoinder take the place of sober discussion. Thus while during certain strikes in the cotton

1. Vide Report of the Textile Labour Inquiry Committee, Vol. II, Final Report, pp. 110-111.

2. Report of the Central Provinces and Berar Textile Labour Enquiry Committee, 1941, p. 31.

TABLE XXXVII
*Variation in the Earnings of Workers in Four Occupations in
 Cotton Mills in Cawnpore, 1937¹*

Average earning per month of 26 working days	No. of mills in which the average earnings are as per column (1)			
	(a) Roving tenters	(b) Ring siders	(c) Grey winders	(d) Two loom old type weavers
Below Rs. 15	1	2	2	..
Between Rs. 15 to 17	..	1	1	..
Between Rs. 17 to 19	1	2	1	..
Between Rs. 19 to 21	3	4	3	..
Between Rs. 21 to 23	1	1	..	1
Between Rs. 23 to 25	2	1	2	..
Between Rs. 25 to 27	2	..	..	1
Between Rs. 27 to 29	..	..	1	..
Between Rs. 29 to 31	..	..	..	..
Between Rs. 31 to 33	..	..	..	..
Between Rs. 33 to 35	..	..	..	1
Between Rs. 35 to 37	..	..	..	3
Between Rs. 37 to 39	1	..	..	3
Between Rs. 39 to 41	..	..	..	1
Between Rs. 41 to 43	..	..	..	..

(a) Variation from Rs. 13-15-0 to Rs. 37-2-8.

(b) Variation from Rs. 12-5-0 to Rs. 23-10-0.

(c) Variation from Rs. 10-5-0 to Rs. 27-0-6.

(d) Variation from Rs. 22-14-0 to Rs. 39-12-0.

in India the labour organizations complain of serious wage cuts, the employers would contend that alterations in piece-rates have taken place with alterations in the quality of the cloth goods manufactured, and that there has been no reduction in piece-rates which cannot be supported by the scheme in force in a particular cotton mill by which the structure of piece-rates is built up. Nor do impartial arbitrators have the technical knowledge by which they can judge clearly and accurately the incidence of the alterations of piece-rates on the earnings of the workers or of the adjustment of piece- and time-rates according to the distribution of work, the character of the production and the efficiency of the workers.

1. Report of the Cawnpore Labour Enquiry Committee, p. 46.

No doubt, the fixation of uniform wage standards for the various occupations would eliminate a constant source of friction in the textile industry which now and then flares up into a big industrial dispute. It would also promote solidarity among the textile operatives. The payment of the same wage for the same job is the indispensable basis of collective bargaining. Without this the employer can effectively sow seeds of disunion among groups of workers. With standardization even illiterate workers can fight their battle for the improvement of wages and working conditions collectively. Thus the solidarity among the ranks of workers can indirectly assist in achieving standardization of wages through the application of the principle of collective bargaining. In other industrial countries the progress of standardization in the textile industry has been intimately associated with the development of a strong trade union movement capable of negotiating national minimum wage scales.

The Scheme of Standardization in Ahmedabad

In India the only textile centre where the attempts at standardization have been somewhat systematic and successful is Ahmedabad. In 1920 the wages of warp and weft piecers, doffers, oilers and muccadams in the ring frame departments were standardized. The rates then standardized have since been subjected to uniform cuts and increases. In addition to these occupations, the other occupations covered by agreed schemes of standardization during the last twenty years are doffers, oilers, and muccadams in the speed frame departments, firemen and drivers. In 1938 as a result of the joint efforts of the Ahmedabad Millowners' Association and the Textile Labour Association, Ahmedabad, standardization of weavers' wages was also achieved. Late in the same year wages of drawers-in and reachers were standardized with the abolition of contract system in that department. Nearly 80 per cent of the wage bill of the textile industry in Ahmedabad and about 70 per cent of the workers in that centre have been brought under the purview of the various standardization schemes adopted.¹

1. See Report of the Textile Labour Enquiry Committee, pp. 109-111.

What has been achieved in respect of standardization in Ahmedabad is difficult to follow up in other textile centres and regions. The success of any such scheme largely depends upon the strength of the labour movement and concerted action between labour and management, which has to be ascribed in this centre largely to the influence of Mahatma Gandhi. Standardization of wages sometimes means the reduction of wage rates in some units and in some occupations. It is to the credit of the Ahmedabad labour movement that although the weavers' standardization scheme involved roughly reduction in wages in one-third of the number of mills, increase in another one-third and stabilization in the rest, this could obtain ready acquiescence from the rank and file of the workers. No scheme of standardization should be adopted or can succeed before at least certain minimum wage scales in different jobs or occupations are adopted by agreement between capital and labour. The adoption of the minimum living wage of Rs. 15 only in Cawnpore will itself stand against the standardization of wage rates, there being such a wide gulf left between this minimum and wages in the other categories. At least a minimum wage of Rs. 25 per month for the unskilled workers in the textile industry should be adopted. The Textile Labour Enquiry Committee, Bombay, have recommended the following minimum wage scales :

Women Sweepers	Rs. 20
Men Sweepers	" 24
Coolies and other unskilled workers	" 25
Doffers and creelers	" 22

Discrimination between men and women workers so far as the minimum wage scale is concerned seems unsound. For the principle of wage-fixation here stresses the cost and standard of living. After the adoption of the minimum wage schedule the occupational differentials will have to be worked out by a committee representing both labour and management. It will be easier to come to an agreement about the standardization of jobs and their denominations and of wages in the case of time-workers. In respect of the piece-rate workers, weavers should first be considered, and their wages may be standardized by fixing a basic rate per loom or looms per day.

plus allowances for superior kind of cloths. This would be the simplest scheme of standardization of weaving rates which may be adopted, provided there is goodwill between labour and management. There is obviously greater advantage in the standardization of rates than in the standardization of wages, for the former gives an operative of superior skill and efficiency opportunities to improve his earnings without any arbitrary limits and this is an advantage for both labour and management. The danger of initiating the scheme of standardization where the trade union movement is not strong, nor is there co-operation between labour and management, is that the standard rates are liable to be fixed too low so that the average earnings of the workers would be indirectly cut. This has actually happened in many textile centres. It is, therefore, essential that the strength and solidarity of the labour movement should be tested by experience, first, in the adoption of minimum wage scales for the unskilled and lowest paid workers in the industry, and then in the abridgement of the prevalent considerable gap between the wages of unskilled, semi-skilled and skilled workers before undertaking the standardization of wage rates in the textile industry.

Earnings in the Jute Industry

Jute mills constitute an important section of the textile industry in India, employing about 320,000 workers in 1944. Statistics in respect of wages in jute mills are extremely unsatisfactory. In 1922-23, 321,000 workers were employed in the jute industry and were responsible for an output of 4 million jute bales as compared with 6 million bales that were produced in 1939 by 298,967 workers with increased hours of employment in the mills that sometimes even over-stepped the legal maximum of 60 hours a week by obtaining exemptions from the Factory Act. Unlike the Indian cotton mill industry, there has been hardly any appreciable rationalization or introduction of labour-saving devices in the jute mill industry of Bengal, which has encountered the full blizzard of the economic depression since 1927-28. On the other hand, the industry adjusted itself to the conditions of depression largely by trenching upon the workers' standard of living.

by large-scale concerted reduction of the number of working days per week, and sealing of 10 per cent of the looms as well as diminution of wage rates, starting with a deduction of about an anna in the rupee and ultimately covering 10 to 15 per cent of the average earnings of the jute worker. The two general strikes in the jute mill industry, the first in 1929 and the second in 1937 were symptoms of acute discontent of the labour force. The strike of 1937 involved about 219,800 workers and caused a loss of Rs. 35.5 lakhs in wages. The demands put forward by the strikers were: a minimum wage of Rs. 30 per mensem, free housing accommodation, doles for the unemployed, jobs for relatives, and free education for the workers.

As war orders were received from the U.S.A. during the World War II the hours of work were extended to 60 per week and the looms unsealed, creating a sudden demand for labour in the entire jute belt. Soon after the execution of the orders, the hours were reduced again to 54 per week and 10 per cent of the looms sealed, causing great hardships to the large floating body of unemployed badliwallas. Again in June 1943 a huge order of 700 million yards of hessian was obtained from America. The looms were again unsealed, but the 54 hours week was continued. There was no attempt on the part of the Indian Jute Mills' Association either to absorb the large section of badliwallas into the production through the double-shift system or to adjust the wage rates either to the intensification of toil involved in increased quota of production with the existing plant and without reduction of waste and bad material, or to the rise of the cost of living in the jute mill area by about 300 per cent. On the whole the war and amenity allowances increased the average earnings of the jute workers by about 20 per cent.

Table XXXVIII gives a rough indication of present wages in the various jobs and categories. The Kamarhatty Jute Mill may be considered as the most representative among the establishments. The Birla jute mill, the southernmost establishment in the jute belt, gives higher wages and the Sri Hanuman in Howrah lower wages than the average.

(Single shift 54 hours per week. Rates include 10 per cent war allowance. An additional amenity allowance of Re. 1 per week is given in each case, irrespective of job.)

TABLE XXXVIII
Average Weekly Wages in Jute Mills, 1944

Department	Designation	Birla	Kamarhatty	Bengal	Sri Hanuman					
		Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
Batching	Softener Sirdar	6	15	9	6	7	0	6	9	3
	Softener Feeder	4	6	3	3	15	0	3	14	6
	Cutter	4	11	3	4	2	0	3	11	9
	Breaker Sirdar	6	6	9	6	6	0	6	9	3
	Breaker Feeder	4	2	0	3	2	3	3	6	0
	Teaser Feeders	4	6	3	3	2	3	3	2	6
	Breaker Sirdar	6	15	9	6	6	0	6	4	9
	Drawing Feeder	4	6	0	3	0	9	3	2	6
Preparing	Breaker Receiver	4	2	6	3	2	3	3	2	6
	Finisher Receiver	4	2	6	—			3	2	6
	Roving Sirdar	9	0	9	10	0	3+	8	0	0
					(Bonus Rs.)	2-7)				
	Shifter Sirdar	5	9	6	5	14	6	5	5	0
Spinning	Shifter	4	11	3	4	7	3	3	10	0
	Rovers	4	15	0	4	8	3	4	5	3
	Roving Feeders	4	10	9	3	2	3	3	7	3
	Head Sirdar	13	10	9	18	13	6	13	4	0
	Line Sirdar	9	3	9	10	6	9	9	0	0
	Spinner (Spg.-Weft)	6	6	0	4	13	0	5	12	0
	Shifter	4	0	6	4	7	3	3	12	6
	Piecer	4	1	6	4	13	0	4	10	3
Winding	Coolie-Sirdar	7	8	6	6	1	9	6	5	0
	Rover-coolies	5	10	9	3	14	6	3	11	9
	Sweeper	3	15	6	2	12	6	2	14	0
	Cop. Winding Sirdar	8	13	0	6	11	0	6	15	0
	Spool markman	6	9	9	5	9	0	3	13	6
Beaming	Bobbin cleaner	3	13	3	3	0	9	2	14	0
	Head Sirdar	13	6	0	11	14	0	10	0	6
	Beam carrier	6	9	9	—			3	6	0
	Coolie	3	13	3	3	5	3	3	13	6
Weaving	Sweeper	3	13	3	2	12	6	2	14	0
	Head Sirdar	24	9	3	31	8	0	—	—	—
	Weavers	10	13	0	8	8	0	average	—	—
	Coolie-sirdar	6	9	9	5	9	0	4	11	9
Finishing	Cloth-coolies	4	11	3	3	14	6	3	11	9
	Calendar Sirdar	8	13	0	7	6	9	8	10	0
	Damping coolies (sacking)	4	6	6	—			3	11	9
	Hammering Sirdar	7	1	9	9	7	6	8	4	0
Sack Sewing	Twins coolies	4	15	3	—			3	15	6
								3	0	0

TABLE XXXIX
Average Weekly Wages in Jute Mills, 1928
(Single shift 60 hours per week)

Departments				Average Weekly Wages		
Batching:						
Head Sirdar	..	..	..	12	15	3
Other Sirdars	..	..	..	7	2	1
Workers	..	..	..	6	5	3
Sacking Preparing:						
Head Sirdar	..	..	..	13	12	9
Other Sirdars	..	..	..	9	13	6
Workers	..	..	..	3	12	6
Hessian Spinning:						
Head Sirdar	..	..	..	14	6	0
Other Sirdars	..	..	..	10	6	0
Workers	..	..	..	4	2	0
Hessian Preparing:						
Head Sirdar	..	..	..	13	12	9
Other Sirdars	..	..	..	10	6	0
Workers	..	..	..	3	12	6
Hessian Spinning:						
Head Sirdar	..	..	..	14	6	0
Other Sirdars	..	..	..	10	6	0
Workers	..	..	..	4	2	0
Sacking Weaving:						
Head Sirdar	..	..	..	24	8	0
Other Sirdars	..	..	..	13	4	0
Workers	..	..	..	9	8	0
Hessian Weaving:						
Head Sirdar	..	..	..	24	8	0
Other Sirdars	..	..	..	13	4	0
Workers	..	..	..	8	4	6
Machine Sewing:						
Head Sirdar	..	..	..	12	0	0
Other Sirdars	..	..	..	8	8	0
Workers	..	..	..	5	0	0
Hand Sewing:						
Head Sirdar	..	..	..	9	8	0
Other Sirdars	..	..	..	7	8	0
Workers	..	..	..	3	8	0

A comparison with the wage figures submitted by the Indian Jute Mills Association to the Royal Commission on

Labour would show hardly appreciable rise of wages in the various jobs even after the lapse of about two decades and considerable improvement of output, while production is intensified or slowed down, looms sealed or unsealed, and hours of work extended or reduced by the employers in relation to trade condition and without reference to the workers' interests and welfare.

The Birla Manufacturing Co. gave the following figures of average weekly earnings before the Royal Commission on Labour. The 1944 wages are shown for comparison.

TABLE XL

*Average Weekly Wages in the Birla Manufacturing Co.
(Single shift 60 hours per week)*

Department and Category	Average Weekly Wages					
	1928		1944			
<i>Batching—</i>		Rs. As. Ps.	Rs. As. Ps.			
Hessian:						
Sirdars	10	11	1	10	0	9
Workers	4	11	5	4	13	9
<i>Sacking:</i>						
Sirdars	10	10	10	10	0	9
Workers	4	14	3	4	14	0
<i>Spinning—</i>						
Hessian:						
Sirdars	11	7	7	10	4	3
Spinners	5	12	8	5	12	0
Other workers	4	11	3	4	5	6
Half timers	1	14	3			
<i>Sacking:</i>						
Sirdars	11	7	7	10	4	3
Spinners	6	6	10	7	1	3
Other workers	4	11	5	4	7	9
<i>Weaving—</i>						
Hessian:						
Sirdars	15	1	6	22	5	6
Weavers	9	7	11	10	0	0
Other workers	6	10	1	7	5	6
<i>Sacking:</i>						
Sirdar	14	7	2	26	12	0
Weavers	9	3	10	11	10	0
Other workers	6	10	0	7	5	6

A recent enquiry by the Employment Adviser, Government of Bengal, has shown that the average wage of skilled operatives in the various departments varies from Rs. 14 to 50 per month. The sardars who are the key-men and who are generally promoted from the ranks of skilled and semi-skilled workers obtain salaries ranging from Rs. 25 to 75 per month. Unskilled and unclassified workers obtain wages varying from Rs. 10 to Rs. 25 per month.¹ In 1942, Mr J. A. Walker, Chairman of the Indian Jute Mills Association, observed that 56 per cent of the jute mill workers earned between Rs. 15 and Rs. 30; 40 per cent earned more than Rs. 30; and 4 per cent received less than Rs. 15 per month. The Bengal Chatkal Mazdoor Union in a memorandum estimated in 1943 that the average earning for the whole industry would be in the neighbourhood of Rs. 22 to 23 per month. There is a great disparity of earnings among the jute mill workers. Rs. 8 to 12 a week or Rs. 32 to 48 per month may be reckoned as the usual earnings of the sardars but sometimes they earn as much as Rs. 125 a month. The great majority of the workers engaged in batching, preparing, spinning, winding and beaming obtain from Rs. 4 to 6-8 a week or Rs. 16 to 26 per month. Sacking weavers earn on an average about Rs. 10 a week, and hessian weavers Rs. 8 a week. At the present level of prices in the jute mill centres, a single worker would need about Rs. 23 to make both ends meet on the basis of his existing scale of living. The bulk of the jute mill workers now earns between Rs. 16 and 24 per mensem, while the unskilled workers at the bottom of the economic scale earn between Rs. 15 (sweepers) and Rs. 20 (coolies). Obviously for the vast majority of the unskilled and semi-skilled jute operatives there must be two earning members in order that the working class family can at all manage to eke out its existence in the jute mill villages and towns. Nor is it possible for these categories of workers to improve their earnings much individually, while the ups and downs of the industry hardly offer security of employment to the mass of workers.

Women workers comprised formerly 15 to 25 per cent of the operatives in the jute mill industry. But women labour is

1. "Indian Finance," March 21, 1940.

now considerably reduced, forming only about 7 per cent of the total labour force. Women now usually work as selectors, drawers, feeders and receivers, warf winders, hand-sewers and in a few other jobs in batching, preparing and finishing departments. Their wages vary from Rs. 4 to 7 per week, although sack sewers may earn as much as Rs. 11 per week.

The Chaotic Wage System

In spite of the fact that most of the jute mills are concentrated in a comparatively small area along the river Hooghly and are managed mostly by Britishers and produce almost all classes of goods, wage rates are found much less standardized than even in the cotton mill industry. Mills under the same managing agents and situated in the same neighbourhood show different wage rates for the same kind of jobs. As the Memorandum of the Bengal Government before the Royal Commission on Labour puts it: 'Perhaps in no industry in the world situated in such a circumscribed area, is the wage position more inchoate.' The Kankinara (jute) Labour Unions urged before the Commission that the wages for time-work should be so reduced to a rate per hour and rates for piece-work (mostly weaving) so revised in all the mills in the different centres that no weaver might grumble that he is paid so much less than a fellow worker in another mill for an identical piece of work. Indirectly the absence of standardization played no small part in the series of jute mill strikes which for some time threatened to paralyse a considerable section of the industry in 1929.¹ On the employers' side the jute industry of Bengal has a strong well-knit internal organization just like the cotton mill industry of Bombay and Ahmedabad and yet there is no attempt at standardization of wage rates of any kind. In fact the divergence of rates for similar jobs and categories in Kamartatty, Champadany, Tittagarh, Uluberia, Howrah and Budge Budge is the despair of those who want to see harmonious relations established between jute mill labour and management.

It is not surprising that discontent is seething among the workers who move from mill to mill in the same locality and

1. Evidence of K. C. Ray Chowdhury before the Royal Commission on Labour.

find that workers doing the same jobs are paid differently in different mills. In 1930, there was a big strike in the old Champadany Jute Mill, Hooghly, which lasted for about two months and which simply arose out of a demand by weavers for the same rates of wages as were paid in another mill under the same management. Eventually the whole mill had to close down. It resumed work with a reduced labour force, the majority of whom were new recruits. The general strike in 1937 was also largely rooted in the wide-spread grievance of the workers in the entire jute belt due to the disparity of wage rates for identical processes from centre to centre and from mill to mill in the same locality. Nothing illustrates more the urgency of standardization of wage rates in the jute mills, which being situated in a compact area can easily secure a more rational and agreed wage system. Much more easily than the Millowners' Associations in Bombay and Ahmedabad, the Indian Jute Mills Association in Calcutta which has most of the mills of Bengal under its control, can undertake the standardization of wage rates by mutual agreement instead of permitting the present divergences in the standards of payment of labour to be challenged by recurrent strikes. There is no industry in India where the management follows such an arbitrary policy of discharging and expanding the labour force, and curtailing and expanding output and hours of employment varying from 45 hours to 60 hours per week, without reference to the wishes of the workers at all, and yet which receives both direct and indirect assistance from Government in respect of the fixation of the maximum prices of raw material, and its delivery to the mills. No industry in the world takes such undue advantage of the heterogeneous composition of labour hailing from different provinces and speaking different tongues in maintaining such disparity in the standards of remuneration and conditions of employment.

CHAPTER XI

WAGES IN THE ENGINEERING AND METALLURGICAL INDUSTRIES

Wage Level in the Engineering Industry in Different Countries

Wages differ in different industries in a country. The cost of living, the nature and efficiency of labour and the economic position of the industry are the major factors that account for differences in wage levels in the various industries. In the engineering industry, jobs are often hot, arduous and hazardous. This explains the much higher scales of wages prevailing here than in general industries in most countries of the world. The average number of workers employed in the engineering industry in the whole country in 1942 was 224,480. In the Bombay Presidency 46,089 workers were employed in the engineering works in 1934, of whom 30,134 were employed in Bombay City alone. In Bihar the general engineering works employed 6,119 and the railway workshops 11,849 workers in 1938. Besides, the Tata Iron and Steel Works alone employed 28,674 persons. This is the largest iron and steel plant in the whole of Asia. We would consider in this chapter the wage system and wage rates adopted in this big industrial establishment.

Nothing shows the disorganized state of industrial labour conditions in India than the fact that whereas in most countries of the world the average wage in the iron and steel industry is about double that of an ordinary industrial worker, in our country the wage in the iron and steel and engineering industries is actually lower by about 15 per cent than the rate prevailing in the textile industry. In Great Britain, for instance while the average weekly earning for all industry groups is 87s. 11d. and for the textiles 61s. 5d., for the group representing metal, engineering and ship-building the average weekly earning is 103s. Wages in the engineering industry in India indeed, occupy a very low rung in the wage scale. The ave-

rage wage earnings (taking all earnings into account) of the workers of the Tata plant are Rs. 42.63, if we exclude the employees drawing salaries more than Rs. 100 per month. The movement of wages is given below :

TABLE XLI

Year	Average earnings (excluding profit sharing bonus)	Average earnings, taking all earnings into account
	Rs.	Rs.
1927	27.85	27.85
1929	35.35	35.35
1932	29.79	29.79
1933	35.58	36.54
1937	38.35	42.17
1938	38.73	42.63

This may be compared with the average earnings of Rs. 41-13-0 for the workers in the General Motors India Ltd. employing 3,500 workers in Bombay in 1938.

The following table gives the comparative wage levels in iron and steel and textile industries in different countries :

TABLE XLII

Comparison of Rates of Wages in Iron and Steel, and Textile Industries in Different Countries

	(1) Hourly Rate of Wages in the Iron and Steel Industry	(2) Hourly Rate of Wages in the Textile Industry	(3) Ratio of (1) to (2)
India	Rs. 0.150	Rs. 0.152	0.987
Great Britain	1.37s.	0.70s.	1.96
U. S. A.	\$0.826	\$0.412	2.0
Japan	Y.0.404	Y.0.171	2.26

An elaborate survey of economic conditions of 637 families of workers of the Tata Iron and Steel Works at Jamshedpur was undertaken by an investigator appointed by the Bihar Labour Enquiry Committee. The families were chosen by random sampling. The average wage here works out to Rs. 34. There are some supplementary non-industrial earnings due

to which the average income of a working family in the Tata plant rises to Rs. 35-1-6, as compared with Rs. 24-11-9 in other concerns at Jamshedpur. It has also been calculated that the living wage for a single adult industrial worker is Rs. 20 per mensem at Jamshedpur. Food consumption in grades of income below Rs. 20 is absolutely deficient. At the Tata plant the number of workers whose wage proper is less than Rs. 15 a month, is 7,365 out of a total of 28,674.¹ The number of workers whose earnings are between Rs. 15 and Rs. 20 is 5,122. The number of those who earn between Rs. 20 and Rs. 30 a month, an income which enables them to eke out their living somehow without chronic distress, but also without any amenities, could not be worked out due to absence of proper classification.

Movement of Wages and the Cost of Living

On the whole, it may be stated that about 12,000 workers or 40 per cent of the Tata employees do not obtain a living wage (Rs. 20); their earnings with bonus cannot ensure even the irreducible minimum standard of living at Jamshedpur. The cost of living is the highest in Jamshedpur as compared with all other industrial centres in Bihar. In the Company's Answers to the Questionnaire of the Bihar Labour Enquiry Committee, the period of 1908 to 1912 has been fixed as the basis for showing the movement of cost of living during recent years. Since Jamshedpur began to be built in 1907, it will be appropriate to fix the base period somewhat later, allowing adequate time for a small hamlet in the wilderness to grow into a premier industrial town in India. As a matter of fact, if the base period were taken as 1918 to 1924, instead of 1908 to 1912, the average cost of living at Jamshedpur would show a much higher figure in 1937-38 than only 7 points. Apart from articles of food, clothing and fuel, house-rents have risen steeply during these years. The rents of the cheaper types of houses, where the majority of the Tata workers live, have, it is estimated, increased from 50 to 65 per cent. Unfortunately the

1. Vide the Tata Iron and Steel Company's Report on the conditions affecting the labourers of the Jamshedpur Works, submitted to the Bihar Labour Enquiry Committee, p. 37.

monthly figures published by the Director of Industries, Bihar, on which the tabulated statement of index numbers prepared by the Company is based, does not include rent.

In the absence of adequate data concerning cost of living indices, furnished by the Government of Bihar, it may be worth while to use certain data based on careful estimates of the relative importance of commodities in the family budgets of Tata workers and the movement of local commodity prices compiled by Mr S. P. Saksena. The base period here is 1909 to 1913. The major items of food, clothing and fuel and tobacco leaf have been included. (Rent figures could not be incorporated in the preparation of these indices.) The weighted general cost of living index numbers at Jamshedpur are as follows:

TABLE XLIII
1909-1913 = 100

Year		Weighted Cost of Living Index
1914	..	114
1915	..	121
1916	..	120
1917	..	122
1918	..	131
1919	..	206
1920	..	191
1921	..	194
1922	..	183
1923	..	158
1924	..	157
1925	..	159
1926	..	171
1927	..	167
1928	..	166
1929	..	157
1930	..	133
1931	..	108
1932	..	105
1933	..	99
1934	..	106
1935	..	97
1936	..	94
1937	..	94

It is interesting to record the years 1917 and 1920, which were years of increased cost of living and were followed up by big strikes, saw an increase of wages by 10 per cent and 40 per cent respectively. It is evident that these increases were not at all proportionate to the cost of living. Again, 1926 to 1928 were years of high cost of living. In 1927-28 wages actually fell by 2 per cent; but the third strike came in 1928 when wages were once more reviewed and the same grade and flat rates prevail up to now. Prior to World War II there had been a large reduction in the cost of living.

But the movement of the cost of living and the fall of price-level should not be permitted to obscure the central fact that Jamshedpur is the dearest place in the whole of Bihar, and that in relation to the cost of living the unskilled workers and a considerable portion of semi-skilled labourers, totalling approximately 12,000 earn less than even Rs. 20 which may be considered as the bare subsistence wage in this industrial centre. This has contributed to unrest and chronic indebtedness on a scale which has few parallels in other industrial centres in India.

The average earnings of the Tata workers in 1933 came up to Rs. 35-7-2. In 1934 the general average of monthly earnings of all operatives in all occupations in the textile industry came up to Rs. 28-11-4.¹ In 1937 the average earnings of the Tata workmen, excluding the profit-sharing bonus, came up to Rs. 38-12-6. In the same year the average earnings of the cotton mill workers in the city of Bombay came up to Rs. 25-0-10 a month.

Wages, Efficiency, and Profits

In Great Britain and Japan wages of workers in the iron and steel works are about double those of the textile workers in those countries, being 2, and 2.3 times respectively.

Between 1928 and 1939 rationalization was introduced in many shops. In some the number of workers was reduced, vacancies were not filled up and for the remaining workers work was apparently intensified. On the whole, the labour force was slightly diminished since 1928, while production was

1. General Wage Census, Bombay.

increased phenomenally. Since 1923, we read in the Company's Report, no addition was made to the capital of the Company, but its output was expanded from 250,000 tons of finished steel to 420,000 tons in 1927 and to 660,000 tons in 1938. In 1939 the figure has further increased to 721,000. 'During the last few years (1934-1938) the Company has embarked on a period of comparative prosperity, which has reached its peak in the current year,' observes the Company in its Report. Taking into account three major factors, viz. (a) the high cost of living at Jamshedpur, (b) the present lower scale of wages of metallurgical workers as compared with the textile workers in India, and (c) the disparity of the increase of production and of cost per ton per man in most mills, the average earnings of the Tata workers must be considered low. The wages of more than half the number of the Tata workers are such that the bare minimum requirements of living cannot be met.

A high level of general and technical efficiency of the worker at the Tata plant is universally admitted. Distinguished experts from other countries as well as the management's representatives bear eloquent testimony to the fact that in some respects these workers are not inferior to any in the world. The output of the establishment has substantially increased without any or appreciable improvements in mechanization in such plants as : (1) Old Sheet Mills, (2) New Blooming Mills, (3) Plate Mills, (4) Merchant Mills, (5) Bar Mills, and (6) Rail Mills, indicating an obvious increase of industrial efficiency of the workers. Making every possible allowance for the increase in production due to mechanization of certain sections or units of the plant, it cannot be denied that the increase of production is in some measure due to the increased efficiency of the workers.

In order to effect mechanization, extension or addition of the works, no extra capital was invested by the share-holders. Since 1923, we read in the Company's Report, no addition has been made to the capital of the Company but its output has expanded from 250,000 tons to 420,000 tons in 1927. In 1927 the labour force stood at 24,238. In 1938 it was reduced to 23,527 but the production increased from 420,000 tons in 1927 to 660,000 tons in 1938. During the period all the mechaniza-

tion, improvement, or extension of plants, etc. have come out of profits set aside at different times without an adequate consideration of quota due to the producers. The depreciation and other reserves have increased and have been added to the capital value of the works. The reserves and depreciation fund stands (1939) at Rs. 16,54,27,420, while the gross block assets including collieries stand at Rs. 26,71,95,018.

Even apart from the increase of the sale price of the manufactured products which is naturally subject to fluctuations from time to time, the share-holders' original investment has multiplied many times as a result of these accumulated profits, to which the workers on account of their continually increased efficiency have contributed substantially. In the absence of any fresh investment of the share-holders' capital it must be assumed that the workers' contribution in increasing the capital value of the investment through depreciation or otherwise has been by far the largest. For a considerable period the current market value of the Tisco shares has been phenomenally high.

The argument that the scheme of profit-sharing bonus gives the workers a legitimate share of the excess divisible profit, does not stand scrutiny. In fact, if the works were to be taken over by the State at its market value today, the profits of investment would be about 5 times. Large deductions are made for the various reserves with the immediate consequence of substantial reduction of the workers' share of profit. Besides, the increment of earnings due to the bonus, represents a small proportion of the wages. No general increase of wages has been given for the last 12 years. We have shown above that the level of wages in the steel industry has been very low in comparison with other industries. During this period of 12 years the position of the industry has been changed from one of precariousness to steady and continuous prosperity.

It is essential that the industry which has now reached its peak of prosperity and has given Rs. 2,38,80,000 as dividend on shares of all denominations in 1937-38—the highest amount paid so far to the share-holders of the Company—should guarantee at least a living wage for the lower economic strata of its workers. At least a minimum wage of Rs. 20 should be

safeguarded for all workers, and a time limit of three years given within which this minimum wage should be established for the industry. The minimum wage in a metallurgical work is to be considered with reference to: (a) the cost of living in the industrial centre—this would indicate the minimum wage at Rs. 20; (b) the irksomeness and hazard of the metallurgical jobs—general wages for these are estimated as almost double those of an ordinary industry in other countries, which would indicate an average wage of about Rs. 50; (c) the profits of the industry itself.

If the profits of the Company expand satisfactorily without further addition of capital and the industry works in the national interest, the excess over the reasonable upper limits of dividend to the share-holders should be shared by the workers and the State. This should be particularly so, when during over 3 decades that the industry has been in existence, it has received tariff protection and subsidy, while no efforts have been made to reduce the cost to the consumers.

The following table shows the continuous increase of trading profits of the Company :

TABLE XLIV

Years				Rs. in lakhs
1929-30	..	..	..	82.26
1930-31	..	..	..	99.13
1931-32	..	..	..	87.58
1932-33	..	..	..	121.85
1933-34	..	..	..	244.10
1934-35	..	..	..	280.64
1935-36	..	..	..	256.02
1936-37	..	..	..	276.56
1937-38	..	..	..	411.46

A reference may be made in this connexion to the phenomenal rise of the managing agents' (Messers. Tata Sons, Ltd.) remuneration, which was fixed according to agreement at 5 per cent, or 7, 8, or 9 per cent, if the dividend exceeds 8, 10 and 12 per cent of the net profit (or a minimum of Rs. 50,000).

The respective increases in the remuneration of the workers and of the managing agents are shown below:

TABLE XLV

	Workers' average earnings including profit-sharing bonus	Rs.	Managing Agents' remuneration
1927	..	27.85	Rs. 50,000
1929	..	35.35	..
1932	..	29.79	..
1933	..	36.54	..
1937	..	42.17	..
1938	..	42.63	Rs. 33,71,831
1939	Rs. 40,53,531

It will appear from the above table that the average earnings of the workers have increased during 1927 and 1938 from Rs. 27.85 to Rs. 42.63, whereas the Managing Agents' remuneration has increased from a minimum of Rs. 50,000 to Rs. 40,53,531, i.e. more than eighty times.

Bonus Schemes

It has been argued that the different bonus schemes materially supplement wages, and hence though there has been no material revision of wage-rates since 1928, the total earnings of the workmen have substantially increased. It is difficult to assess the proportion of bonus payments to wages proper for different categories and income-groups of workers in the absence of adequate data.

The investigator appointed by the Bihar Labour Enquiry Committee who has dealt with 637 families of Tata workers, has found, however, that supplementary earnings such as bonus, overtime and acting allowances and provident fund contributions accrued to 509 amongst them, but such earnings represent an insignificant proportion of the income. (In the enquiry the profit-sharing bonus was not considered, being

recently introduced). The following tables show the distribution of families according to income and its various sources :

TABLE XLVI

Income Group	Nature of Income			Percentage of additional earnings to total income		
	Wages	Additional	earnings			
	Rs.	As.	Ps.	Rs.	As.	Ps.
Less than Rs. 10	27	14	0	..	..	..
From Rs. 10 to 15	532	9	9	15	11	3
From Rs. 15 to 20	1,069	7	3	79	2	9
From Rs. 20 to 30	2,337	10	3	478	10	6
From Rs. 30 to 40	4,476	8	0	1,067	9	6
From Rs. 40 to 50	5,492	3	0	1,422	14	3
From Rs. 50 and over	3,810	13	3	995	9	9
Total	17,747	2	6	4,059	10	0
						18.1

Additional earnings from industry comprise items like bonus, overtime, acting allowances and provident fund contributions by the Company. These are shown separately for the various income grades. The figures in brackets indicate families where such items occur.

TABLE XLVII
Additional Earnings Incidental to Industry

Income-Group	Bonus	Overtime	Acting	Provident Fund
	Rs. As. Ps.	Rs. As Ps.	Rs. As. Ps.	Rs. As. Ps.
Less than Rs. 10	..	..	..	..
Rs. 10 but not 15	13	13	3 (12)	1 14 0 (2)
Rs. 15 but not 20	65	4	6 (49)	13 14 3 (11)
Rs. 20 but not 30	366	12	6 (88)	111 14 0 (75)
Rs. 30 but not 40	748	2	6(127)	298 3 0(135)
Rs. 40 but not 50	933	0	6(143)	412 3 9(151)
Rs. 50 and over	695	7	0 (90)	287 2 9 (90)
Total	2,822	8	3(509)	13 0 0(1) 98 14 0(6) 1,125 3 9(464)

It will be evident from the above table that in the income groups of the employees whose wage proper is below Rs. 20

and who constitute 40 per cent of the total number of employees, the bonus and provident fund contributions together constitute only 6.8 per cent of the total earnings. As the wages increase, such supplementary earnings are found to increase proportionately, excluding, however, the majority of the workers from adequate benefits.

As a matter of fact, there is considerable dissatisfaction among the labourers as regards the categories of employees who benefit under the different bonus schemes. It is pointed out, for instance, that the general production bonus which is intended for those who help production does not apply to several categories of workers who take part in the production process and materially contribute to the increase of tonnage of finished steel, directly or indirectly. It is difficult to draw a line between direct and indirect participation in the production process, whether for general or departmental production bonus determination, and the workers who feel that an invidious distinction has been created, show discontent that is not removed even by the introduction of the profit-sharing bonus scheme, which is generally applicable and adds to the total annual earnings of only the top-most workers.

From the standpoint of labour, no bonus scheme can compensate workers for an increase in their basic wage-rate. The latter benefits them not merely by adding tangible income which they can understand and anticipate, but also by an increase in amenities of different kinds of leave, provident fund contribution, and gratuity. In view of the fact that there has been no material wage revision for more than 10 years, it will be desirable that the general and departmental production bonus schemes be done away with, excepting the profit-sharing bonus scheme, that the earnings of workers from the different kinds of bonus be consolidated as part of the wages proper, and a revised standard wage rate with increment and with graded promotion be introduced.

The Living Wage

The Company in its reply to the Questionnaire of the Bihar Labour Enquiry Committee has stated that it has in practice introduced a minimum wage of 8 $\frac{1}{2}$ as. per man and 7 as. per

woman for all its workers. In the case of contractors' labour a provision has also been introduced in their contracts, compelling them to pay not less than 8 as. per man and 6 as. per woman to their labour. It should be pointed out that up to about 1928 the wages of the Tata unskilled workers were much lower :

TABLE XLVIII

	Up to about 1918	1928	1937	Living wage
Wages of Men	5 as.	7 as.	8 as. 9 ps.	11 as. 6 ps.
Wages of Women	3 as. 6 ps.	5 as.	7 as. 9 ps.	11 as. 6 ps.

It has been mentioned that any wage less than Rs. 20 per mensem cannot be regarded as a living wage in Jamshedpur, and the sooner the living wage is established as the minimum, safeguarding the standard of living for all workers, the better. It may be argued that agricultural wages in Singhbhum are on a lower scale, and that the guarantee of a higher minimum industrial wage may lead to migration from the villages and cause industrial unemployment in the already congested industrial centre. Against this it could be pointed out that it is only the surplus agricultural labour which seeks employment in such strenuous and irksome jobs as the engineering industry can provide, and that it will be far better if there be a limited proportion of permanent well-fed and well-clad workers rather than a horde of ill-nourished and inefficient hands who alternate between agriculture and industry. It was argued in the course of oral evidence on behalf of the Tata Workers' Union that in some departments the Company takes advantage of chronic unemployment at Jamshedpur by replacing permanent by temporary workers on lower rates of pay, who remain temporary even after 3 to 5 years of service. If this be even partially true, such a policy would bring down the standard of living of a large section of industrial workers, and aggravate the evils of unemployment.

*Wage per hour of Workers in the Mechanical Engineering
Industry in Different Countries, 1939*

	India	Great Britain ¹		Australia ¹	
		s.	d.	s.	d.
Fitters and Turners ..	0 8.9	1	4.85	2	6
Iron moulders ..	0 4.2	1	5.36	2	3
Pattern makers ..	0 2.8	1	6.18	2	8
Unskilled workers ..	0 1.1	1	0.77	1	10

TABLE XLIX

Earnings of Different Categories of Workers in Tata Iron and Steel Works, Jamshedpur, 1939

Category of Work	Number of workers	Average monthly earnings March 1939	Average Daily Earnings
Khalasis ..	3084	Rs. As. Ps. 41 4 0	Rs. As. Ps. 1 7 6
Crane Drivers ..	570	81 6 0	2 14 5
Masons ..	385	58 14 0	2 1 7
Machinemen & Turners ..	338	68 9 0	2 7 2
Moulders ..	173	58 10 0	2 1 6
Fitters (Machine shop) ..	168	77 12 0	2 12 5
Helpers ..	151	48 7 0	1 11 8
Fitters (Millwright shop) ..	130	64 5 0	2 4 8
Coupling Porters ..	105	40 12 0	1 7 3
Openers ..	103	64 7 0	2 4 9
Catchers ..	100	91 8 0	3 4 3
Roughers ..	91	103 5 0	3 11 0
Furnace men ..	76	98 15 0	3 8 6
Doublers ..	66	91 8 0	3 4 3
Men Labourers ..	4044	17 4 0	0 9 10
Women Labourers	2699	13 11 0	0 7 10

1. International Labour Review, Statistics, March 1939.

TABLE L

Earnings of Different Categories of Workers in the Engineering Industry, Bombay City

Category of Work	Average Daily Earning		
	Rs.	As.	Ps.
General Maistris	3 9 6
Pattern makers	2 9 8
Moulders	1 14 11
Drillers	1 9 4
Welders	2 6 10
Blacksmiths	2 5 3
Hammer men	1 3 10
Tinsmiths	2 4 2
Fitters	2 7 1
Carpenters	2 6 0
Masons	2 1 4

Comparing the wages of different categories of workers among the different iron and steel plants in Jamshedpur, in Kumardhubi and in Bombay, we find that in Bombay wages are generally higher than in Jamshedpur, that in some categories the Tin Plate Company of India actually pay higher wages, and that the rates are generally the lowest in Kumardhubi. So far as Jamshedpur itself is concerned, the average wages per month in the Tata works are slightly higher than those in the Tin Plate Company and nearly double those in the Indian Steel and Wire Products Ltd., the Indian Cable Company and the Tatanagar Foundry. Both in the Indian Steel and Wire Products Ltd. and the Foundry, not only are the job rates lower, but the rates have been cut down. In the Foundry, in particular, employment is not regular and the same persons when re-employed are given much lower than their initial rates. The practice is adopted in several establishments in Jamshedpur that workers who are discharged during a strike are re-employed on reduced rates. On the whole, unemployment and repeated strikes have unfavourable effects

TABLE LI
*Earnings of Different Categories of Employees in Tata Iron
 and Steel Works, Jamshedpur, 1944*

Categories of employees	Rates						Approx. average departmental production bonus earning for a man drawing the lowest rate
	From			To			
	Rs.	As.	Ps.	Rs.	As.	Ps.	
Khalasies	0	9	0	2	0	0	p.d.
Masons	1	4	0	2	4	0	"
Crane Drivers	1	0	0	2	11	4	"
Machinemen	1	2	0	2	12	0	"
Turners	1	2	0	3	0	0	"
Moulders	1	4	0	2	12	0	"
Fitters (Machine Shops)	1	8	0	3	0	0	"
Helpers	0	14	0	1	4	0	"
Fitters (Mill-wright Shop)	1	8	0	3	0	0	"
Coupling Porters	20	0	0	25	0	0	p.m.
Openers	1	12	0				p.d.
Catchers	1	4	0	2	4	0	"
Roughers	1	6	0	4	4	0	"
Furnace men	1	4	0	2	8	0	"
Doublers	2	8	0				"
Coolies (weekly-paid)	0	8	9				"
Rejas (weekly-paid)				On appointment	As. 7		
				p.d.	After 1 year's service	As. 7-6	p.d.

on wage-rates and earnings of workers in Jamshedpur, except for the Tata employees.

Table LII classifies the number of 1040 families for whom earnings and family budgets have been collected according to income in the different industrial concerns in Jamshedpur.

TABLE LII
Number of Families in the Various Income Grades

Concerns	Less than Rs. 10	Rs. 10 to 15	Rs. 15 to 20	Rs. 20 to 30	Rs. 30 to 40	Rs. 40 to 50	Rs. 50 and over	Total
Tata Iron & Steel Co.	3	42	70	112	159	159	92	637
Tin Plate Co.	2	4	5	20	36	5	12	84
Wire & Steel Products	2	17	11	17	4	3	2	56
Tatagar Foundry	1	4	14	10	6	1	..	36
The Indian Cable Co.	..	6	1	8	8	8	1	32
The E.I.R. Works	..	..	1	9	4	8	..	22
The Hume Pipe Co.	5	3	1	..	2	..	..	11
Mosabani Mines	9	14	11	58	16	5	1	114
Mowbandar Copper Works	6	7	5	15	11	4	..	48
Total	28	97	119	249	246	193	108	1040
Actual income	240.6.9	1,242.2.6	2,034.2.6	5,991.12.8	8,322.15.6	8,556.8.9	5,924.4.0	31,312.9.9
Average income per family	8.9.5	12.12.11	17.1.6	24.1.0	33.13.4	44.5.6	54.13.8	31.1.1

If we compare the average incomes of various grades of all concerns taken together with the corresponding averages of the various groups under the Tata Iron and Steel Co., on the one hand, and of all the other concerns, on the other, we find that the Tata Iron and Steel Co. figures are almost always higher. The average income of a working family at this industrial centre happens to be Rs. 31-1-1; but if it is working under the Tata Iron and Steel Co., it is likely to have an average income of Rs. 35-1-6, whereas if it be working under the other concerns, its average income would be only Rs. 24-11-9.

It is evident that in the Tata plant the average earning, found on the basis of this intensive investigation, enables the workers to live above want, but hardly permits the ordinary amenities of life in the present level of commodity prices in Jamshedpur, while in the other concerns, it is perilously near the subsistence wage. Out of 1040 families investigated, 244 families or 24 per cent had earnings below the living wage, and 249 had earnings which exclude chronic starvation as well as amenities of life; the food, clothing and living standards of 493 families leaving much to be desired even under Indian conditions. In 1941 the Tata Iron and Steel Company gave a dearness allowance of Rs. 2-8 per month to those earning Rs. 50 and below, and the allowance was increased up to Rs. 4 with the rise of earnings up to Rs. 125 per month. The increase of Rs. 2-8 to the lowest category of workers, comprising about 25 per cent of the total number of workers did not bring up their remuneration to the living wage level.

There has been no change during war time in the basic wage rates of the different categories of workers of the Tata Iron and Steel Company. The only extra income they are getting is in the shape of dearness allowance and war emergency bonus. The dearness allowance is now paid at the following rates: For employees working in Jamshedpur on wages or salaries inclusive of bonuses and allowances not exceeding Rs. 100 per month, the dearness allowance is Rs. 10 per month. Employees on wages or salaries, inclusive of bonuses and allowances exceeding Rs. 100 but not Rs. 200 per month get a dearness allowance of Rs. 13 per month. The war emergency bonus is paid to all the workers at Jamshedpur whose salary

does not exceed Rs. 500 per month, at the rate of 10 per cent of their salary with a minimum of Rs. 5 per month. Those employees who absent themselves without proper sanction for more than two days in a month forfeit the entire amount of bonus for the month. A pro-rata deduction is also made in the case of employees absent on duly authorized leave.

The cost of living at Jamshedpur is the highest in Bihar due to high shop rents, salami and other payments and the distance from the big wholesale markets. At Patna the cost of living indices were 181 and 394 in 1942 and 1943 respectively. Jamshedpur's cost of living index is even higher than these figures. Thus the present increments of earnings due to dearness allowance and war emergency bonus fall far short of the rise of the prices of necessities of life even though these are being supplied at the price level prevailing in October 1942.

CHAPTER XII

THE APPROACH TO A NATIONAL MINIMUM WAGE

Difference in Wage Level in the Major Provinces

India comprises different provinces and regions in which conditions of agricultural unemployment and wages, and the supply and demand for industrial labour are markedly divergent. The pace of industrialization is not uniform in the different regions. Thus the increasing class of farm hands and agricultural labourers, displaced from the land and unable to find employment in the villages, is not absorbed by industry at the same rate in different regions. In some, the development of organized industries is confined to a circumscribed area along a river or a railway, and restricted to a few industrial towns. The progress of the labour movement and hence of collective bargaining is also different in different regions. All these factors have brought about wide divergencies in the wage levels between Province and Province, and between agricultural and industrial areas within the same Province. Accurate and up-to-date statistics are not available but

Table LIII, derived from the Report of the Royal Commission on Labour and based on the cases of the industrial workers coming under the Workmen's Compensation Act in the various Provinces, indicates the general trends of differences in wages:

TABLE LIII
Wage Levels in Different Provinces, 1925-1929¹

Province	Percentage of cases earning monthly wages of:								Total No. of cases 1925-29
	Less than Rs. 13	Rs. 13 to Rs. 17-8	Rs. 17-8 to Rs. 22-8	Rs. 22-8 to Rs. 27-8	Rs. 27-8 to Rs. 32-8	Above Rs. 32-8			
United Provinces ..	26	27	15	9	7	16		304	
Madras ..	22	25	19	15	4	15		110	
Central Provinces ..	18	38	17	8	4	15		209	
Bihar and Orissa ..	21	24	21	12	8	14		717	
Bengal ..	13	18	18	15	10	26		873	
Punjab ..	10	16	36	10	7	21		324	
Bombay ..	3	10	19	23	13	32		1,273	

It will be evident that the wage level is lowest in the U.P., Madras, and the C.P. Bengal, and Bihar & Orissa have a higher level. In British India the wage level is highest in Bombay.

The actual wages given to the lowest grades of workers employed on manual work in factories and other undertakings, and in field labour in agriculture, as between the major Provinces, may be roughly compared as follows:

TABLE LIV
Average Monthly Wages, 1937-1939

Provinces	Unskilled workers in factories	Agricultural Labourers
Bombay ..	Rs. 17 to 20	Rs. 7 to 9
Punjab ..	Rs. 9 to 12	Rs. 6 to 8
Bengal ..	Rs. 9 to 12	Rs. 5 to 8
Bihar and Orissa ..	Rs. 7 to 10	Rs. 4 to 7
Central Provinces ..	Rs. 6 to 9	Rs. 4 to 6
United Provinces ..	Rs. 8 to 12	Rs. 5 to 7
Madras ..	Rs. 7 to 10	Rs. 4 to 6

1. Report of the Royal Commission on Labour in India, p. 204.

Methods of Devising a National Minimum Wage Scale

With such disparity in the levels of wages the minimum wage scale should be implemented by all-India legislation, though it should avoid too great alterations in the present wage rates in the various Provinces. The danger of declaring a living wage markedly differing from current ruling rates is pointed out by Sawkins with reference to Australia: "The risk of disturbing the nominal purchasing power of the vast masses of the community whose living depends on wages is too formidable. The economic consequences of either large inflationist or large deflationist measures are too incalculable."¹ An approach to a national minimum should, however, be made in India, and this would involve several stages in the development of the wage policy in the different Provinces on certain common scientific principles:

Firstly, we shall have to lay down certain norms of food requirements according to physiological research and also standards for other elements of human consumption and welfare, which make up a decent standard of living acceptable for the community. It is on this scientific basis that 'the living wage standard' should be fixed, forming the basis of the minimum wage regulation, which will safe-guard, in the words of the Federal Arbitration Court in Australia, 'the normal needs of the average employee regarded as a human being living in a civilized community'.

While on one side norms of nutrition, clothing, housing, education and recreation will have to be developed, standard budgets of the workers' expenditure at different levels of income will also have to be set up. In an important I.L.O. publication it has been pointed out that the standard budget approach towards devising a measure of minimum wages and standards of living supplements the methods of elaboration of norms, and is in fact much more widely used. The chief reason is that the elaboration of norms for many elements of consumption has not been found easy, being subject to divergent social considerations which cannot be objectively measured. The two methods of approach should be adopted simultaneously in devising the national minimum wage scale.

1. Sawkins: "The Living Wage in Australia", p. 48.

'It seems logical', observes the Report, 'that for purposes of social policy, the two methods should be combined. As norms of nutrition, housing, clothing, etc. are elaborated, they can be applied in setting up and in computing the costs of standard budgets.'

The Basic Energy Requirement for Indian Workers

The following norms of nutrition for the Indian working class have been suggested by me:

TABLE LV
*Indian Dietetic Standards*¹

	Calories	Proteins in grams	Fats in grams	Carbo- hydrates
Northern India (Wheat and legume-eaters) ..	3,000	85	60	605
Bengal and Southern India (Rice & legume-eaters)	2,400	75	50	472
McCarrison's Standard ..	3,500	100	90	450

Nutrition experts stress that 'good' diets should exceed the minimum standard by at least a 50 per cent margin. 'Poor' diets do not satisfy the minimum standard in one or more respects.

Dr W. R. Aykroyd, Director of the Nutrition Research Laboratories, Coonoor, has recently laid down a minimum standard of daily intake of about 2,600 calories for an adult worker in India. His figure is based on the assumption that an Indian male of sedentary occupation requires some 2,130 calories, a figure 10 per cent below that of the League of Nations. To this he adds only 470 calories for six hours' 'moderate' work at the lowest reckoning. Now the industrial worker in India normally works on an average for 8 to 9 hours, and not for 6 hours as Aykroyd has assumed. Thus one should add at least 900 calories, according to the schedule of supplementary calories necessary for muscular activity as fixed by the Expert Commission of the League of Nations.²

1. See my "Food Planning for Four Hundred Millions."

2. The Indian Factories Act, 1934 maintains the 60 hour week and 11 hour day for seasonal, and 54 hour week and 10 hour day for perennial factories. The textile mills generally work 9 hours a day and 6 days in the week. Hours of work are 8 a day in the metal works and 9 a day in the seasonal factories. 10 to 12 hours a day are usual in the bidi, mica and other unregulated factories. During war time the hours have been extended to 10 a day in the textile factories and 11 a day or 70 per week in the jute mills and ordnance factories.

In our opinion, the standard of 2,600 calories for an Indian industrial worker is too low. Dr Aykroyd's results, it is understood, were not based on any investigation of the basal metabolism of groups of Indian workers, which underlies the nutrition standards reached by Dr W. Burridge and the present author in the Physiological Laboratory at King George's Medical College, Lucknow. The physiological experiments conducted over a course of years in respect of oxygen consumption at this laboratory have demonstrated that 1,200 to 1,400 calories represent the resting need of Indian peasants and workers, as compared with 1,600 to 1,800 calories in the United States and 1,700 calories for the British worker. Now the Food Committee of the Royal Society has, as a result of experiments and experience, estimated that for moderate work 700 to 1,100 calories, and for heavy work 1,100 to 2,000 calories are required in excess of resting need due to the increase of metabolism. Thus the actual calorie needs of the Indian worker will be higher than Dr Aykroyd's minimum of 2,600 calories on which basis he has set out to prepare his standard dietary. This is brought out by the following table of comparison:

TABLE LVI

	Basal metabolism	Additional calo-ries necessary for an industrial	Dietetic norm for industrial labour	worker
Western worker (in Great Britain and U.S.A.) . .	1,700-1,800 (Calories)	1,800-2,000 (Calories)	3,500-3,800 (Calories)	
Indian worker . .	1,200-1,400 (Calories)	1,800-2,000 (Calories)	3,000-3,400 (Calories)	
<i>Total Energy Requirement for an Indian for One Day</i>				
Basal metabolism for an Indian for 24 hours	..	..	1,400	Calories
Saving in sleep (to be deducted)	..	..	42	
Corrected basal metabolism	..	..	1,358	
Cost of day's activities=55 kg. (average body weight of an Indian) \times 16.18	..	..	890	
Total cost of metabolism	..	..	2,248	
'Tax' for influence of food (6 per cent)	..	..	135	
Day's requirement	..	..	2,383	

Energy Requirements according to Occupations

Workers in sedentary occupations, agriculturists undertaking work in the fields, miners and industrial workers, require different grades of calories per day for their occupations, in addition to the basic requirement of 2,400 calories. Various estimates of calorie requirements according to occupations have been given by physiologists and nutrition workers of different countries. Table LVII distinguishes between different kinds of work and gives the calories required for men and women of average physique:

TABLE LVII
Daily Calorie Requirement according to Occupations
(Mary Swartz Rose)

Type of occupation	Total calories per day		Calories per kg. per day
	Men	Women	
At rest but sitting most of the day ..	2,000-2,200	1,600-1,800	30-33
Work chiefly done sitting ..	2,200-2,700	1,900-2,200	34-37
Work chiefly done standing or walking	2,800-3,000	2,300-2,500	38-42
Work developing muscular strength ..	3,100-3,500	2,600-3,000	43-50
Work requiring very strong muscles ..	4,000-6,000	..	50-70

In practice, however, it is by no means easy to calculate an adequate diet, appropriate to various categories of work on the rigid basis of calories tabulated, since the different categories often blend and are exceedingly complex. Thus it is only actual examination of the particular work or job undertaken by groups of persons, of their physique, habits of life and other factors that can give a surer clue to the determination of energy requirements for each.

Recently, Professor Neville Moss has shown that certain heavy work, such as that of coal miners, requires food of greater energy value than was usually supposed. Instead of the usual assumption that the daily net energy requirement does

not exceed 3,500 calories, Professor Moss shows by experiment in oxygen consumption that allowing for walking to and from home, and other forms of energy output during the remainder of the 24 hours, a collier will spend about 4,500 calories in energy per day.¹ Similarly in the U.S.S.R. it is found that the daily energy expenditure of the worker is: for the building industry 4,500 calories; ploughmen 5,000 calories; men planting vegetables 4,100-4,800 calories; and reapers 7,000 calories. The Russian standards are approximately 15 per cent higher than those admitted in Western Europe and the U.S.A. Thus the average figure for an adult is 3,800 calories, and for heavy work 4,300 calories. It is found in Central Asia that in the case of workers working in excessive heat, the protein requirement increases. Table LVIII gives a classification of occupations based on figures expressed in kilograms (for a period of 10 hours' work) with calorie expenditure.²

TABLE LVIII

Mechanical work (kg.)	Calories	Mainte-nance Ratio	Occupational Supple-ment	Total Calories	Occupations
50,000	118	2,400	400	2,800	Small trades; tailors; copyists; dress-makers
80-100,000	110	2,400	900-950	3,300	Heavier mechanical work; shoe-making by hand
120-150,000	350-360	2,400	1,400-1,500	3,800 -3,900	Work demanding strength; excavating; quarrying; work in docks

A great number of workers in a country is engaged on work demanded by 100,000 to 120,000 kilograms on a ten hour day.

Kestner and Knipping give another classification of types of work and calories attributed to each.

1. Quoted in Florence: 'A Scientific Labour Policy for Industrial Plants', International Labour Review, March 1941.

2. "Workers' Nutrition and Social Policy", (I.L.O.), pp. 35 and 194

TABLE LIX

1. Sedentary work	2,200-2,400 calories	Intellectual work, clerks, scribes, overseers, officials, employees
2. Muscular work	2,600-2,800	Tailors, mechanics in light engineering, lithographers, type-setters, teachers, professors, speakers, overseers, small traders, machine workers (shoe-makers, tailors)
3. Moderate muscular work	About 3,000	Shoe-makers, bookbinders, doctors, postmen, the majority of factory workers
4. Considerable muscular work	3,400-3,600	Metal-workers, painters, joiners, locksmiths, dyers, weavers
5. Heavy muscular work	4,000 and over	Brewers, masons, blacksmiths, soldiers, agricultural workers, porters, athletes, textile workers, glass workers, clothiers, wood-workers.
6. Very heavy muscular work	5,000 and over	Agricultural workers, miners, quarrymen, metal workers (heavy metal trades), tanners, porters, stone-cutters, wood-cutters, dockers, navvies

The standards adopted by the Health Organization of the League of Nations and used in their investigation are as follows:¹ A man or woman in a temperate climate, living an ordinary everyday life but not engaged in manual work requires 2,400 calories per day. Additional calories should be allowed according to the amount of muscular work as follows:

1. "The Problems of Nutrition," Vol. II, League of Nations Publication.

TABLE LX
Extra Calories Per Hour Of Work Necessary

Light work ..	..	..	..	75
Moderate work ..	..	..	..	75 to 150
Hard work ..	..	..	..	150 to 300
Very hard work ..	..	..	..	300 upwards

In order to illustrate the way in which the scales should be computed, the following arbitrary examples are cited:

TABLE LXI

Individual	Energy allowance for basic diets (without work) in net calories	Supplementary allowance for special activity			Total energy allowance in net calories
		Number of hours of special activity	Number of calories per hour of activity	Number of calories per hour of activity	
Man weighing about 70 kilograms, aged 20 to 59 yrs. ¹					
Sedentary ..	.. 2,400	0	0	0	2,400
Light work ..	.. 2,400	8	35	35	2,700
Moderate work ..	.. 2,400	8	75	75	3,000
Hard work ..	.. 2,400	8	150	150	3,600
Very hard work ..	.. 2,400	7	300	300	4,500

With an energy allowance of 2,400 calories for basic Indian diets (without work), we have to add 600 to 1,350 calories for 9 to 11 hours of work in the Indian factories according to the League of Nations Nutrition Commission schedule, making up a total of 3,000 to 3,750 calories. It may be noted for comparison that Inata found on the basis of experimental data that an average worker in Japan weighing 55 to 60 kgs. requires 2,800 to 3,000 calories.

The computation of the number of adult nutrition units to which a family is equivalent is illustrated by the following example referring to energy requirements.²

1. Average height is reckoned at 68 inches.

2. "Family Food Consumption and Dietary Levels" (Bureau of Home Economics), U.S.A., p. 375.

TABLE LXII

Family member			Equivalents in food energy units
Man, 70 kg., moderately active ..		..	1.00
Woman, 60 kg., Do.		..	0.83
Boy, aged 10 .. ..	..	..	0.80
Girl, aged 5 .. ..	..	..	0.50
		..	
Total		..	3.13

The acceptance of Dr Aykroyd's norm of only 2,600 calories for Indian workers in all kinds of industries would involve severe bodily exhaustion and decline of the power of resistance which will contribute towards industrial inefficiency, greater absenteeism and prevalence of disease and mortality. It is regrettable that the Bombay Textile Labour Enquiry Committee adopted Aykroyd's dietetic norm, although Lt.-Colonel S. S. Sokhey and Dr. A. S. Erulkar set up their theoretical minimums at a higher level. In Baroda, Antia and Kale had previously fixed a standard of 2,700 to 3,000 calories for the agriculturists of Baroda. According to Erulkar the monthly expenditure on food for a family of 3 consumption units which are non-vegetarian works up to Rs. 29.5, whereas Dr Aykroyd's estimate even including certain 'extras' such as sugar works out at Rs. 22.8 per month. To call sugar an 'extra' in a dietetic norm for non-vegetarian workers can be defended neither by economics nor by physiology, the standard of living of modern countries being often measured in terms of the consumption of sugar.

The Indian Dietetic Norm, Vegetarian and Non-vegetarian

Our dietetic norm for Indian industrial workers—coolies, miners, textile workers, workers in the building and engineering industries, quarrymen, masons, dockers and the rest—is the minimum daily intake of 3,000 to 3,750 calories according to occupations. This may safely be taken as an absolute minimum for the 'living wage standard' in India.

TABLE LXIII
Dietetic Norm for an Adult Worker in India

Calories	..	..	..	..	3,000
Protein	..	..	..	..	85 grams
Fats	..	..	..	..	60 "
Carbohydrates	..	..	..	..	605 "
Calcium	..	..	..	..	0.68 "
Phosphorus	..	..	..	..	1.32 "
Iron	..	..	..	..	15 milligrams
Vitamin A	..	..	..	..	6,000 international units
Vitamin B	..	..	..	..	2 milligrams
Vitamin C	..	..	..	..	60 "
Riboflavin	..	..	..	..	1 "

*A Well-balanced Diet for an Adult Worker per day
(11.4 grams=1 tola)*

		Non-vegetarian diet	Vegetarian diet
		grams	grams
Whole wheat, millet or unmilled rice		400	450
Pulses	..	100	100
Green vegetables	..	125	125
Green vegetables (non-leafy)	..	125	170
Fats and oils	..	50	60
Fruits	..	70	70
Milk	..	250	500
Egg	..	1 or 2	nil
Meat and fish	..	100	nil

This dietetic norm is to be translated in terms of money. This has been done for the United Provinces. Several dietaries have been drawn up which yield about 3,000 calories and which cost between Rs. 3-8 to Rs. 4 per mensem at the pre-war price level. One such standard dietary for an adult worker is given in Table LXIV.

TABLE LXIV
Standard Diet for an Industrial Worker

		Daily consumption	Cost per mensem at pre-war prices
			Rs. As. Ps.
Cereal:			
Wheat-Bajra	..	12 chhataks	1 12 10
Pulses:			
Gram	..	..	0 2 0
Dal	..	2 chhataks	0 7 9
Oil	..	1½ tola	0 4 0
Salt	..	..	0 1 0
Spices	..	..	0 1 0
Gur	..	1 chhatak	0 4 1
Fruits and Vegetables	..	..	0 8 0
		Monthly cost	3 8 8

16 chhataks = 1 seer = 80 tolas

A Typical Poor Diet

A typical, inadequate and 'ill-balanced' working class diet is given below:

TABLE LXV
Distribution of Quantities of Food Materials and Calories

Calories	..	..	..	..	2,752
Protein (in grams)	..	..	..	..	66
Fats (in grams)	..	..	..	..	10
Carbohydrate	..	..	..	..	526
Calcium (in grams)	..	..	..	..	0.25
Phosphorus (in grams)	..	..	..	..	0.90
Vitamins A (International Units)	..	..	..	..	1,100
Vitamins C (in milligrams)	..	..	..	..	60

Whereas the average physiological requirement for different kinds of work is represented by 3,000 to 3,750 calories, the worker gets only 2,752 calories, while the diet, characterized by a poverty of protein, excess of starch and deficiency of certain mineral elements and vitamins, is also seriously defective in quality.¹ There is no doubt that as essential

1. See the author's "Food Planning for Four Hundred Millions", for an analysis of several working class diets, pp. 78-84.

physiological needs are left unsatisfied for the majority of the Indian working class, industrial inefficiency, absenteeism and occasional idleness as well as a high incidence of disease and mortality become inevitable. On the other hand, as wages increase among workers of the skilled category, the consumption of non-cereal foods and especially milk products, meat and vegetables, tends to improve in the right direction, leading to an improvement of general health and industrial efficiency.

The Average Consumption Units in a Working Class Family

In the absence of full enquiries relating to the average size and composition of working class families in the different Provinces in India, we may work out standard consumption units by applying Lusk's co-efficients of comparison of the food requirements of women and children with those of an average man to the average family structure in Bombay.

TABLE LXVI-A

*Size and Composition of the Working Class Family in Bombay
(All industries, 2,473 Families Investigated in 1921-1922)*

Persons living in the family			Dependants		
Men	Women	Children (under 14 years)	living away from the family	Total	
1.10	1.10	2.00	0.60	4.80	

A more recent investigation of 194 families by my pupil, V. S. Rastogi, in the jute industrial belt in Bengal gives the following interesting results:

TABLE LXVI-B

*Size and Composition of the Working Class Family in Howrah
(Jute Industry, 194 Families Investigated in 1944)*

Wage Earners in the working class family			Dependents living with the family			Dependents living away from the family			Total		
Men	Women	Boys	Men	Women	Boys	Girl	Men	Women	Boys	Girls	
under 15 yrs											
1.03	.31	.02	.01	.41	.5	.36	.01	.65	.52	.38	4.2
Total			1.28						1.56	4.2	

Lusk's Table of Food Requirements

Child (0 to 15 years)	0.7
Adult Male (15 and upward)	1.0
Adult Female (15 and upward)	0.83

We would assume that the dependents of industrial workers left behind in the village have some kind of subsistence to depend upon and exclude them in the calculation of the minimum wage, minors and women being taken generally along with the workers into their homes in the industrial centres. This would give for the average workers' family based on the Bombay figures : 1.10 men=1.10 ; 1.10 women=0.913 ; and 2 children =1.4; altogether 3.413 consumption units. Calculating the cost of the standard dietary for a family of 3.4 consumption units the estimate would work out at $3.4 \times \text{Rs. } 3\text{-}8\text{-}8$ or Rs. 12-0-8. To this we have to add the expenditure, for a normal family of four, on milk and milk products and ghee, or in the alternative, meat, which can be better reckoned by the family and not by the per capita consumption.

Milk—Re. 1,

Ghee or meat—Re. 1-4

This would result in a total of Rs. 14-4-8 as representing the cost of the dietary norm in the United Provinces. This figure may be compared with the Bombay Textile Enquiry Committee's standard of Rs. 22-8 and Dr Erulkar's figure of Rs. 29-5 (non-vegetarian norm) for an average sized worker's family of a man, wife and two dependents (or three consumption units).

Clothing and Housing Norms

In respect of clothing and housing standards the norm cannot be laid down as definitely as the standard of dietary, which though it varies in different climates and regions can be expressed quantitatively in terms of the proximate principles of nutrition. Clothing and housing standards are largely a matter of social conventions and considerations that vary widely according to races and regions, and that cannot be measured precisely by objective scientific standards which are applicable in respect of nutrition. Housing requirements in particular differ with peoples and climates, prevalence of

diseases and other factors. Housing norms should subserve the basic needs of maintaining a thermal environment which avoids undue heating or heat loss from the body and providing adequate privacy for the joys of family life, including the raising and rearing of children. For Indian clothing and housing standards, the norms were set up by the present writer in the Committee of Aims and Purposes of National Planning. These are given below.¹

45 yards of clothing per annum per adult.

100 sq. ft. of living space in the house per capita.

In the slums of the industrial cities of India where the most considerable majority of the working population—76 per cent in Cawnpore and more than 96 per cent in Bombay city—lives in single-room bustees or tenements, with four to a dozen inhabitants each, normal family life is impossible. For setting up the housing standard in India, we have to adopt a two-fold test; viz. first, that the accommodation or room space avoids overcrowding which can be measured objectively; secondly, there should be ample privacy and separation of sexes which alone can ensure happiness and the decencies of family living. The Australian Royal Commission on the Basic Wage laid down the minimum of a four-room house as necessary for the working class. This is also the standard for the minimum house in the U.S.A.—4 rooms: a living room, a kitchen, two bed rooms, and a bath room. In Great Britain the standard adopted is even higher. The density of houses cannot exceed 12 per acre, and it is laid down that for a normal working class family there shall be provided a dwelling containing a parlour, kitchen, a scullery, three bed rooms, and a bath room in addition to the ordinary conveniences. In Japan, the working class quarters built in Yokohama by the state-subsidized Dojunkai Association show an accommodation for one person of one or two rooms with a floor space between 79.3 and 133.2 sq. ft., and for two to seven persons two rooms with a floor space between 133.2 and 239.8 sq. ft. This arrangement is intended to meet the minimum requirements of the poorest classes of the urban population. The workers' quarters, apart from the rooms, in-

1. National Planning Committee's Report, I, p. 80. The clothing standard has been raised from 30 to 45 yards so as to include bedding, wrapper, headgear, etc.

clude an equipped kitchen, drawing room, store room, a drying room, running water and gas installation.¹ In India, we should adopt a two-room bustee or tenement with a verandah as the minimum accommodation. The same room should not, as at present, be used as kitchen, living and bed room for adults and grown up boys and girls; the verandah is also a necessary enjoyable adjunct in the Indian climate. The working class tenements should not be built back to back, and the alleys should be wide so that one need not turn sideways to pass through them. There should be an adequate number of water taps, bathing and washing places, latrines and urinals. The Rent Enquiry Committee, Bombay, laid down a definite minimum housing standard as follows: 'It is desirable to discourage construction of one-roomed tenements, but wherever they are found necessary they should not be of less than 180 sq. ft. in size and should not accommodate more than 4 persons.'² Not only should the minimum size of the rooms be laid down, but the minimum number of cubic feet per head, apart from the room, should also be prescribed, in order to prevent overcrowding. Recently, the Ahmedabad Municipality has in its municipal bye-laws prescribed a minimum provision of a room, a verandah, and a kitchen. The minimum dimensions of a living room are fixed at 12'×12'. One living room, a kitchen and a verandah, either in front or behind, may be accepted as a reasonable housing standard for the Indian working class. In the United Provinces the accommodation of two rooms with a verandah may be had at a rent of Rs. 3-4 per mensem.

Calculation of the National Minimum Wage

We may now estimate the dietetic, clothing, housing, and other norms as follows for setting up the national minimum wage scale. (Refer Table LXVII overleaf.)

The living wage of Rs. 30-13 per mensem arrived at may be compared with the Bombay figure of Rs. 44 as the living wage for a man and his family, with the average unskilled worker's wage of Rs. 11-6 in Cawnpore and Rs. 12 in Calcutta and industrial suburbs, and with the Bihar coal miners' and loaders' wage of Rs. 10, all immediately before the war.

1. "The Workers' Standard of Living" (I.L.O.), p. 94-95.

2. Report of the Rent Enquiry Committee, Bombay, 1939, Vol. I, p. 59.

TABLE LXVII
*The National Minimum Wage Standard for a Worker's Family
of Four Persons*
(Cost per month at pre-war prices)

			Rs.	As.	Ps.
1.	Physiologically adequate dietary ..	..	14	4	8
2.	Clothing .. ..	..	4	12	4
3.	Fuel and light .. ..	..	2	0	0
4.	Rent .. ..	..	3	4	0
5.	Betel, tobacco, soaps and cigarettes ..	..	1	8	0
6.	Ceremonies and festivals ..	..	1	0	0
7.	Education .. ..	..	1	0	0
8.	Barber, washerman, and tailoring charges ..	..	1	0	0
9.	Recreation, travelling and medicines ..	..	2	0	0
			Total	30	13

Consumption habits change for the Indian workers quickly in the new industrial environment or as they migrate from one Province to another. Workers are seen to change from wheat to rice and vice versa or turn to cheaper food-grains. The prices of milk and milk products, meat and fish in the industrial centre also determine trends of consumption of these. All this involves revision of weights given to different items of consumption from time to time. More divergent are the norms of expenditure of the workers in the different Provinces of India on recreational and cultural interests. These cannot be strictly expressed or measured, and yet without these the standard of living will be merely a 'fodder minimum'.

The average cost of a standard ration of 3,000 calories, composed of a variety of foods fulfilling the physiological standards laid down, should be periodically determined in different parts of India at different seasons of the year. Also it is necessary to determine in the light of the economic and social background of the different Provinces of India the percentage of the indispensable minimum wage which this ration should represent. On the whole, this proportion should be fixed at about 50 per cent of the wage.¹

The average expectation of life may be conveniently used as the best all-round criterion for the norms of consumption,

1. This was the recommendation of the Labour Conference of the American States in 1936. See "Workers' Nutrition and Social Policy," Appendix I, p. 181.

work, and leisure, it being understood, however, that the plane of living should ensure not merely health and industrial efficiency but also personal freedom and cultural development. It is obvious that opportunities for personal freedom and culture will be more available to workers above the subsistence level. Thus for the purposes of social policy there should be set up standard family budgets at (a) a subsistence minimum, (b) a decency minimum, and (c) a comfort minimum.¹ The problem in India is, however, largely if not mainly, that of lifting the working class family above the poverty line. The deficiencies in the Indian working class budgets are of an elementary character, the minimum physiological norms of dietary, clothing and housing being left unsatisfied for the major portion of the working population.

Rise in the Cost of Living in War Time

During the period of the war the prices of the principal necessities of life have risen throughout India and sky-rocketed, causing great hardships to the working class. In no other country in the world except China has inflation reached such serious proportions. In China the cost of living in 1944 is estimated at thrice what it was seven years ago. The movement of index numbers shows that in Bombay, Ahmedabad, Nagpur and Cawnpore the cost of living has now doubled or trebled, while wage increments have varied from only 12½ to 33 per cent in different centres. Thus a larger proportion of the Indian working class is now in the poverty line than before the present war.

The rise of the cost of living during the war period in India and Great Britain is shown in the following table:

After 1943, the cost of living index numbers show a slight fall in most industrial centres, due to the substitution of nominal control prices in ration shops for the market prices. It is difficult to ascertain, however, to what extent this fall reflects an actual lowering of the cost of living. There has also been a wholesale substitution of cheaper and less nutritive cereals for the dearer and more nutritive ones and the new index numbers which have been improvised in Bombay or

1. See "The Workers' Standard of Living" (I.L.O.), p. 58.

TABLE LXVIII

*Working Class Cost of Living Index Numbers in the Industrial Cities
of India and Other Countries, 1939-1943*

Centre	Base Period	'39	'40	'41	'42	'43
Bombay	Year ended June, 1934—100	106	112	122	157	230
Ahmedabad	Year ended July, 1927—100	73	79	86	114	206
Sholapur	Year ended Jan., 1928—100	74	76	84	113	184
Nagpur	Year ended Jan., 1927—100	61	63	..	105	190
Patna	Average of 5 yrs. ending 1914—100	109	..	..	181	394
	(Aug.)					
Madras	Year ended June, 1936—100	100	107	..	133	177
Lahore	Jan. 1931-Dec., 1935—100	125	129	..	205	336
Cawnpore	Average prices in Aug., 1939—100	..	111	..	181	306
Calcutta and Surrounding Industrial area	Average prices in Aug., 1939—100	..	106	115	144	289
U.K.	July 1914—100	158	184	199	200	199
U.S.A.	1929—100	84	85	89	97	..
					(June)	
Canada	1929—100	83	87	92	97	..
					(June)	
Australia	1929—100	89	93	98	105	..
					(June)	
Japan	1929—100	121	144	147	154	..
					(June)	

Nagpur, for instance, cannot represent the exact situation with reference to the standard of food consumption. Even when the same cereal is available, the quality has deteriorated due to adulteration; while the quantity as well as the combination of different cereals as fixed under the rationing regulations deviate from the pre-war standard of food. With reference to the housing standard, greater congestion of the living space, due to the large increase of workers in each industrial centre, shows a general deterioration that cannot be fully represented by the rise of rents. A re-examination of the measuring yard-stick that has changed during the war time can alone give the right clue to the trend of the standard of living as represented by items of consumption, group by group.

Inadequacy and Lack of System in the Payment of Dearness Allowance

Table LXIX on pp. 198 ff. shows the wide disparity in the methods of payment of cost of living bonus, or 'dearness allowance' as it is called in India, to workers in some of the principal industrial establishments. It will be clear that the system of payment is chaotic, the amount of dearness allowance being based not on any definite relation between industrial remuneration and rise in the cost of living, but largely determined by the strength of the trade unions and agitation of the workers.

While those industrial workers who have strong and effective trade unions, and salaried persons in Government railways and office establishments have succeeded in obtaining some relief, the majority of industrial workers in the country, who neither belong to any unions nor enjoy the protection of minimum wage regulations, are suffering great hardships due to the sharp rise in the cost of living. The dearness allowance does not fill the gap between the rise of prices of necessities of life and a reasonable minimum standard of living for the great majority of workers. Flat rates of increase varying from 10 to 18½ per cent or a flat increase from Re. 1 to Rs. 5 have been given in many cases. Only in the case of coolies and skilled workers earning between Rs. 15 and Rs. 20, 6 as. per rupee, 2 to 4 as. per diem, a flat increase of Rs. 4·8 to Rs. 6, or 75 per cent of the wages have been given. Where a sliding scale of increment has been given, it is neither commensurate with the actual burden of living costs, nor proportionately higher in the case of lower paid workers. No living wage has also been safe-guarded in this connexion in relation to the rise of the cost of living. Even in the city of Bombay, where the industrial worker has obtained far greater benefits of increment of wages and dearness allowance than in any other industrial town in India, the trend of wages has lagged far behind the increase of the cost of living. A comparison of the trends of the movements of cost of living index numbers and wages in England (as quoted by Prof. Bowley) and in Bombay city will be of interest in this connexion.

In the mills the unskilled worker is now getting on an

TABLE LXIX
*Payment of Dearness Allowance to Industrial Workers
 in India, 1939-1942*

	1939-1940	1941	1942 and after
1. Workers in cotton 2 as. per day per mills under the Bombay workers' As. cost of living index number varied between 105 and 123	Rs. 4-8 to Rs. 9 per worker per mensem on the basis of a sliding scale with the movement of the index number between 124 and 143	War bonus of 12½ per cent of each worker's total earnings during '41; a sliding scale starting at Rs. 14 for index number 164, rising progressively to Rs. 18-8 for index number 183. The war bonus was increased to 16-2/3 per cent of the earnings during '42. The sliding dearness allowance was also extended up to the index number 213 from Rs. 18-8 to Rs. 25-10.	
2. Workers in the cotton mills at Ahmedabad	..	Increase by 45 per cent over the scale of dearness allowance as earnings of '43.	War bonus of 2½ months' wages for each worker. Later on it was fixed at 1/5th of the earnings of '43.
3. Workers in cotton mills under the Southern India Mill-owners' Association	..	Allowance of 12½ per cent or 2 as. in the rupee	Allowance of 18½ per cent or 3 as. in the rupee.
4. Workers in the jute mills under the Indian Jute Mills Association			A dearness allowance of Re. 1 per mensem to all workers, irrespective of wages earned. A war allowance of 10 per cent of each worker's total earnings has been given in '42, calculated on the pre-war wage given in Nov. '39, together with an amenity allowance of Re. 1-4 per week granted irrespective of

jobs and earnings on the present level of working hours, viz. 54 per week. A standard ration of 2½ seers of rice or 3½ seers of atta is also given every week from the mill shop at concession rates. The net concession on all kinds of food-stuffs when all these are available from the employers' grain shops may be estimated for each worker at about Rs. 6 per month.

- | | |
|---|---|
| <p>2. as. per rupee for workers earning up to Rs. 20 a month; 1½ anna per rupee for those earning above Rs. 20 but not over 50; and 1 anna per rupee above Rs. 50 but not over Rs. 100</p> <p>5. Workers in all the Indian-owned cotton mills in Bengal under the Bengal Millowners' Association</p> <p>6. Workers in cotton mills in the C.P.</p> | <p>..</p> <p>..</p> <p>..</p> <p>Restoration of the wage-cut and bringing the wage level to that prevailing in the year '31-'32; a dearness allowance at the rate of 1 pie per day per one per cent rise in the cost of living during the period Sep. '38 to</p> |
|---|---|

THE INDIAN WORKING CLASS

1939-1940	1941	1942 and after
	Aug. '39; and a regularity bonus of Rs. 18 per year payable to workers who are not absent from work for more than 12 days in the year.	2 as. in the rupee 2 as. in the rupee between Rs. 19 and Rs. 25; 1 anna for those earning Rs. 25 to Rs. 32.8.
7. Workers in cotton and woollen mills under the Employers' Association in Cawnpore	..	A minimum allowance of Rs. 10.9 has been granted to cover a cost of living index figure up to 200 points, amounting to about 33 to .40 per cent of the average wage. A sliding scale of increase has also been fixed in relation to each increase of index number. Minimum 5 as. to 6½ as. per worker per day, i.e. Rs. 8.2 to Rs. 10.9 per mensem, plus 1 to 1.4 pice per point of increase of cost of living index beyond 200.
8. Railway employees of the South Indian Railways	..	An allowance of Rs. 2 for employees drawing a salary of Rs. 34 and below; Rs. 2.8 for those getting between Rs. 35 and Rs. 50; and Re. 1.8 for those getting Rs. 51 to 52.

THE APPROACH TO A NATIONAL MINIMUM WAGE 201

- 9. Railway employees of State-owned railways** Bombay and Calcutta: Rs. 12.8 per month. Rs. 4.8 per month to employees on Rs. 120 or below. Towns of 100,000 inhabitants and selected areas: Rs. 8.12 to employees on Rs. 90 or below. Other areas: Rs. 7 to those on Rs. 60 or below.

Bombay and Calcutta: Rs. 3 per month to employees on Rs. 60 per month or below. Selected industrial areas, that is, towns of over 100,000 inhabitants according to the 1931 census: Rs. 2.8 to employees on Rs. 50 per month. Other areas: Rs. 2 to those on Rs. 30 per month and below. These allowances were paid with retrospective effect on wages due for Sep. '40 and subsequent months. Profit-sharing bonus.

A dearness allowance of Rs. 2.8 per month to those earning Rs. 50 and below; over Rs. 50 and up to Rs. 75 per month, over Rs. 75 and up to Rs. 100, 1st May, '42. Rice, wheat, sugar, dals and gur are supplied at the price level prevailing in Oct. '42.

10. Workers in the Iron and Steel Works at Jamshedpur A dearness allowance of Rs. 10 to those earning Rs. 100 and below; Rs. 13 to those earning above Rs. 100 up to Rs. 200. Profit sharing bonus for '43: 2 $\frac{1}{2}$ months; for '42 and '41: 3 months. In addition, war emergency bonus at 10 per cent of salary for those drawing up to Rs. 500 per month since 1st May, '42. Rice, wheat, sugar, dals and gur are supplied at the price level prevailing in Oct. '42.

THE INDIAN WORKING CLASS

	1939-1940	1941	1942 and after
11. Calcutta Port Trust workers	up to Rs. 125, Rs. 4 per month. Profitsharing bonuses are excluded.	Re. 1 to those drawing Rs. 30 and less.	2 as per head per day for index numbers between 92 and 100, dearness allowance at the rate of $2\frac{1}{4}$ as. for every day of attendance, for the month of Nov. '41; besides, a war bonus equivalent to 2 as. in the rupee on the total earnings during the year Jan. '41 to Dec. '41 to all workers.
12. Workers in the cotton textile industry of attendance to cover variations between 74 and 92 (both inclusive) in the Sholapur and 35 in the Sholapur working class cost of living index number	2 as. per head per day	2 as. per head per day	For index numbers between 92 and 100, dearness allowance at the rate of $2\frac{1}{4}$ as. for every day of attendance, for the month of Nov. '41; besides, a war bonus equivalent to 2 as. in the rupee on the total earnings during the year Jan. '41 to Dec. '41 to all workers.
13. Workers in the coal mines of Bengal and Bihar	A dearness allowance amounting to 10 per cent of their total earnings	..	The dearness allowance was increased to $27\frac{1}{2}$ per cent in 1942 and further increased to 50 per cent in Dec. 1943. Food-stuffs and clothes are also given at concession rates.

average Rs. 13 plus a dearness allowance of Rs. 25.3, i.e. Rs. 38.3 per mensem. Casual workers earn between 12 and 14 as. per diem; no dearness allowance is paid to such labour.

TABLE LXX

England		Bombay City ¹	
Cost of Living	Wage Rate	Cost of Living	Wage Rate
(September 1939=100)		(August 1939=100)	
1940	121	113	109
1941	128	121	125
1942	129	130	160
1943	..	..	227
			110
			119
			147
			199

Between October 1938 and January 1943 wages in the major industry groups increased in the United Kingdom as below:

Mining and Quarrying, etc.	..	52.6	per cent
Engineering and Ship-building	..	72.6	"
Textile	..	62.3	"
Average for all ..	..	65.1	"

It is necessary, in the interests of industrial peace and the maintenance of efficiency, standard of living, and morale of all workers in war time, that Wage Boards, like those in Great Britain and many other industrial countries, should be established in the principal industrial centres in India. These Wage Boards should, in the first place, guarantee a minimum living wage for the lowest grade of workers in the different industrial centres. Thus for Northern India the basic amount of Rs. 30 calculated as the living wage at the pre-war price level will have to be increased in proportion to the rise of index numbers of the workers' cost of living. Such rise has been the largest in Cawnpore due to the sharper proportionate increase of the prices of clothing, fuel and lighting than in Western India. Since the cost of living index at Cawnpore has risen to 306 in 1943, as compared with August 1939, the minimum wage should be fixed at about Rs. 90 at the present level of prices, assuming that no other concessions are obtained

1. "Indian Labour Gazette," April 1944.

by the industrial workers in the form of cheaper food-stuffs, fuel, standard cloth, etc. Secondly, the Wage Boards should draw up budgets for a reasonable minimum standard of living for an average working class family, and, at intervals of say three months, ascertain the cost of these budgets by investigation of actual prices. When the cost of the budgets exceeds the base by more than, say 5 per cent, a cost of living bonus or dearness allowance should be paid to the workers. The principle on which a bonus or dearness allowance should be paid, should recognize that the burden of a rise in the cost of the necessities of life falls heavier on the lower income groups, and the dearness allowance or bonus is therefore to be on a sliding scale for the rise of a given number of points in the cost of living index, the percentage wage increase being the largest for the lowest wage rates. With the bulk of the workers in India below the poverty line, it will be fairer to cover the entire rise of the cost of living by wage increments, guaranteeing a minimum living wage for the lowest grade of workers under the present price level. The activity of the Wage Boards should be supplemented by price control measures which are more urgent in industrial centres. To the extent that price control can reduce the cost of living the case for wage increments cannot be pressed. But the cost of living or dearness allowance is seldom paid adequately, lagging far behind the rise of prices. The amount of dearness allowance that has to accrue must be commensurate with the rise of prices, which cannot be dealt effectively due to war conditions. It will also be on the whole more convenient for the workers to obtain grains or standard cloth from Government or employers' shops instead of getting cash bonuses or allowances for meeting the higher prices of these necessities of life. Without Wage Boards examining periodically and systematically the items of the working class standard of living as well as the cost of living, no equitable adjustments in the remuneration of workers are possible that will safe-guard their health and efficiency, and maintain industrial peace. Continuous enquiry and vigilance on the part of the Wage Boards are essential for safe-guarding a minimum wage scale.

Women's Minimum Wage

The question then rises: should women's minimum wage be fixed on a par with men's? Before discussing the subject, it is necessary to make it clear that the wife or daughter of the Indian worker hardly counts at all in Indian industry. Family budget studies in the Bombay Presidency have made it abundantly clear that in the vast majority of cases the wife or daughter is not, in actual fact, in any employment. Of the natural families contained in the family budget studies, 71.65 per cent in Bombay and 74.40 per cent in Ahmedabad depend on the earnings of only the head of the family.¹ While in the actual labour situation the earnings of the wife or daughter are hardly significant in a proper interpretation of the minimum wage, the wife and daughters of the working class family are not to be regarded as adding to its income by work away from home, but as contributing towards happiness and comfort of the family by their household duties in the home where meals have to be prepared, clothing washed and the little ones cared for by them. This interpretation forms the basis of declaration of the basic wage in Queensland, Australia. We read in the Australian Act: The basic wage of an adult male employee must not be less than is 'sufficient to maintain a well-conducted employee of average health, strength and competence and his wife and family of three children in a fair and average standard of comfort, having regard to the conditions of living, prevailing among employees in the calling in respect of which such basic wage is fixed, and providing that in fixing such basic wage the earnings of the children or wife of such employee shall not be taken into account.'²

But there is a large number of unattached women and widows in India who are employed in factories, while in the mines and plantations it has been the practice for the family to work and live together. Recently women labour has been readmitted underground in the mines. The number of women employed in various types of industrial undertakings is

1. Report of the Textile Labour Inquiry Committee, Bombay, Vol. II, p. 28.

2. Queensland Industrial Conciliation and Arbitration Act, 1932. The definition of minimum wage in China also contemplates that one worker shall be entitled to have a sufficient wage to support himself or herself, with two members of a family. Minimum child-labour wages are not to be lower than half the minimum adult wage.

considerable, and since they obtain the lowest wage rates, it is necessary that the minimum wage regulation should specially be applicable to women workers. As a matter of fact, in the minimum wage movement, as it travelled from Australia to Great Britain and thence to the U.S.A., legislation affecting women workers was considered more legitimate than legislation covering men workers in these countries.

Women's Lower Wages

In a previous chapter we have discussed the markedly low wage rates of women workers in mica, bidi, shellac and other unregulated factories. Women sweepers are employed in almost all types of industrial undertakings in the country, and their wages are the lowest, varying from Rs. 6 to Rs. 10, although in Bombay they earn about Rs. 20 per mensem. In the jute mills of Bengal the sweepers earn Rs. 2-12-6 per week.

As a rule women workers are paid on a lower scale even for equal work. In the tea plantations of Assam, the hazira rates for men and women are generally 5 as. and 4 as. respectively. But off and on for several weeks women do the men's jobs at lower wage rates. The disparity of basic rates for men and women for the same garden job for long periods is a crying economic injustice that calls for remedy. In fact one common demand of the Assam garden labour during strikes is the adoption of a uniform hazira rate for men and women. Recently several women investigators of the Universities of Lucknow, Benares and Agra surveyed women's work and wages in Cawnpore. Their results are briefly summarized in Table LXXI.¹

An enquiry conducted by the Labour Office at Cawnpore in 1939 showed that 44 per cent of women workers earned between Rs. 9 and 11 and 22 per cent of them between Rs. 13, and 15. It was unusual for women workers to earn Rs. 15 or more.² The average wage of women workers comes to only Rs. 10-7-6. This may be compared with the average earnings of male unskilled workers engaged for light work in the cotton

1. Miss P. Varma: Industrial Employment of Women in Cawnpore; Miss Kanti Devi Jain: Women Labour in Cawnpore.

2. Report on the Earnings of Women Mill-workers at Cawnpore, Labour Bulletin, U.P., April 1941.

TABLE LXXI
Di-parity of Wages of Men and Women Workers in Cawnpore, 1942

Industry	No. of Women Workers	Category of Job	Wages of Men	Wages of Women
Jute	260	Hand-Sewing	12 as. D	9 as. D
		Carding	Rs. 14 M	Rs. 11 M
		Drawing mchne.	Rs. 14 M	Rs. 11 M
		Daily labourers	6½ as. D	6¼ as. D
Cotton	116	Reeling	Rs. 18 M	Rs. 14 M
Brush	490	Hair Re-opening	Rs. 5 M	Rs. 6 M
		Filling	Rs. 8 to 9 M	Rs. 6 to 7 M
Building	not estimated	Carriers	7 as. D	5 as. D
		Brick ballasting	5 to 14 as. D	3 to 4 as. D
		Ramming of concrete	7½ as. D	6 as. D

and woollen mills—7 or 8 as. per diem, i.e. Rs. 11-6 or Rs. 13 per mensem (on the basis of 26 working days). A boy or girl earns about Rs. 10 per mensem.

Investigations of the Bombay Labour Office have shown that women workers in the cotton mills were receiving Rs. 20, Rs. 21 and Rs. 11-8 ; while men workers obtained more than double their earnings—Rs. 44, Rs. 33, and Rs. 27 in Bombay, Ahmedabad and Sholapur respectively. In the ginning factories women gin feeders earn 3 to 5 as. while the men obtain 5 to 6 as. In the pressing factories women kallawallas earn 4 to 6 as. and the men 6 to 9 as. In the jute mills of Bengal the average woman worker was receiving a weekly wage of Rs. 2-8 ; while in the cotton mills the rate of wages was even lower.¹ Later on the women's wage increased to Rs. 3-0-9 as compared with men's average weekly wage varying from Rs. 4-8 to Rs. 12. The woman sweeper is paid only Rs. 2-12-6 per week; other low paid categories of women workers are card-feeders earning Rs. 3-0-9 and breaker-feeders earning Rs. 3-2-3 weekly. Among the women piece-rate workers, the selectors, the warp-winders and hand sewers earn from Rs. 5 to Rs. 7 per week. To these earnings is of course added the amenity allowance of Re. 1-4 granted to all grades of workers

1. Curjel: "Women's Labour in Bengal Industries," p. 9.

since 1943. In the coal mines in Bihar the women surface coolies usually earned, immediately before the war, 3½ to 4 as. per diem as compared with 5 to 7 as. earned by male unskilled workers on the surface. Now the wage rates vary from 8 to 10 as. per diem. In the mica industry women, who constitute about 20 per cent of the total labour force engaged in factories as well as in cottages, earn about Rs. 4 per mensem. In the shellac factories in Bihar where women are employed chiefly in eliminating impurities from the seed lac, they earn on an average only 2½ as. a day.

Table LXXII will show the disparity of daily wages of men and women workers in the cotton mill industry in the Bombay Presidency:

In Bombay city and Ahmedabad, especially in the textile mills, a few unmarried women do work as in Japan but elsewhere in India it is usually only widows and married women who are employed. Naturally the family consumption unit of women workers would therefore be different in different parts of India. An inquiry at Sholapur has revealed that out of 482 women employed in five cotton mills, 466 were married; 388 declared that they worked only from economic necessity, which had brought them to the town. A similar inquiry at Cawnpore has shown that 61 per cent of the women workers investigated were married and 39 per cent of the total number were widows, of whom 89 per cent depended on themselves for their livelihood. There is no doubt that a not inconsiderable proportion of women workers, mostly widows (except in the unregulated factories where girls are employed in larger measure), are compelled to work due to economic pressure and maintain not only themselves but also their dependants. More women workers are coming to be employed in the seasonal and unregulated factories. Especially in the rice mills coming under the Factories Act, numbering about 1,500 and employing about 36,000 workers, women are being largely employed for soaking and drying the paddy and winnowing the husks. Such rice mills being situated in country towns and rural areas are attracting women of the higher agricultural castes as contrasted with the low and depressed castes which go to the textile mills. In the rice mills,

TABLE LXII
Average Daily Earnings of Men and Women Textile Operatives, 1937-1939
 (The number of operatives is placed within brackets)

Category	Bombay		Ahmedabad		Sholapur	
	Men	Women	Men	Women	Men	Women
One-head Drawing tenters	..	..	1.0-4 (690)	1.0-2 (16)	0.9-8 (274)	0-9-9 (3)
Drawing tenters	1-3-2 (9)	1-1-5 (671)	1-1-11 (133)	1-3-11 (3)	..	..
Single side siders	0-13-8 (4160)	0-13-0 (206)	0-15-9 (4045)	0-15-7 (904)	0-8-10 (1413)	0-10-2 (56)
Doffers	0-10-6 (6950)	0-10-3 (1090)	0-10-9 (5137)	0-10-9 (605)	0-7-1 (1324)	0-6-11 (20)
Double side siders	1-1-10 (4468)	1-2-6 (195)	1-5-10 (1995)	1-5-9 (203)	..	..
Grey winders	0-11-7 (37)	0-9-1 (7654)	0-9-11 (665)	0-8-5 (3359)	..	..
Colour winders	0-15-5 (21)	0-12-8 (3687)	0-11-4 (407)	0-10-3 (1766)	0-5-0 (543)	0-8-0 (368)
Pin winders	1-1-6 (157)	0-11-1 (2936)	..	..	..	..
Coolies	0-12-9 (4590)	0-9-0 (187)	0-10-11 (1723)	0-8-2 (640)	0-8-11 (689)	0-4-11 (164)
Sweepers	0-11-2 (483)	0-8-6 (1248)	0-10-11 (427)	0-9-4 (388)	0-9-4 (32)	0-4-11 (252)

contrary to law, wages sometimes are paid in kind (kura or rice particles) and the hours are too long. Wages given to women in some of the rice mills in small towns vary from 2 to 3 as. Thus Indian industry has to face the problem of the employment of women workers as independent wage earners, and devise the minimum wage for them accordingly.

Children's Wages

Statistics in respect of children's wages in India are even more inadequate, although in 1936, 12,062 children were employed in the factories alone, of whom 2,724 were girls. A considerable number of children is also employed in the plantations. On Assam tea gardens alone as many as 54,928 children were working daily. Their average daily earnings range from 5 pice in the Bengal Dooars to 11 pice in the Surma Valley and 14 pice in the Assam Valley, such earnings including both hazira and ticca. Certain figures relating to children's wages in Bihar have already been adduced in a previous chapter. In the mica industry in Bihar, children who constitute about 10 per cent of the total labour force earn as sorters on an average about Rs. 2 a month, and as splitters about Re. 1-12 a month. In the bidi industry they earn only 1 to 2½ as. a day. In the textile industry children are employed in both cotton and jute mills, in the spinning department (for changing the bobbins) as well as in the winding department. Children are also to be found helping their mothers or relations in the hand-sewing department when their own period in the factory is completed. In 1936, the cotton and jute mills of India employed 99,710 women and 4,825 children, representing 42.6 per cent and 40 per cent respectively of the total number of women and children employed in the factories. Recent figures relating to children's wages in the textile industry are not available. But the following table will indicate the general trend of difference between men's, women's and children's wages in the cotton industry.

In the jute mills, it was estimated two decades ago that 78 per cent workers were men, 16 per cent women and 6 per cent children. The average wage received by the children was about Rs. 10-8, which was

TABLE LXXXIII
*Comparison of Monthly Earnings of Men, Women, and Children
 in a Cotton Mill at Cawnpore, 1922*

	Blowing & Card- ing Room	Mule Room	Throstle Room	Weaving Room
	Rs.	Rs.	Rs.	Rs.
Men				
Time-wages	19 to 20	20 to 28	18 to 22	18 to 29
Piece-wages	20 to 38	34 to 42	..	..
Women				
Time-wages	13	..	..	12 to 14
Piece-wages	..	..	..	..
Children				
Time-wages	13	14	13 to 15	15
Piece-wages	..	..	..	..

somewhat higher than their wage in the cotton mills. Children can no longer be employed in the jute mills, while the proportion of the women labour force has considerably declined. At Kamarhatti which is an old and typical jute mill, the percentage of women workers now is 6.9 as compared with only 2.3 in the Birla jute mill which depends largely on local labour.

Need of Abolition of Sweating

No doubt the national minimum wage regulations in India should begin with the industries in which the largest number of women and children are now employed. Minimum wage rates should be laid down for women and children workers, covering industries such as cotton, jute, mica and shellac manufacture, bidi making, carpet weaving, cloth printing, dyeing and weaving, where 'sweating' has gone on for decades with impunity. The industries where there seems to be the largest amount of sweating are the bidi, metal and shellac industries. Such industries are wide-spread and employ large numbers of women or children or both. In the case of the minimum wage for the woman worker, the wage rate should be so fixed as to supply the necessary cost of living to maintain her in good health and also to protect her morals. In several States in America, Statutes require that

the minimum wage rates for women shall be adequate for the protection of morals as well as health. The Supreme Court of the U.S.A. stressed, in 1923, that the declared basis of the minimum wage rates fixed for the woman employee 'is not the value of the service rendered, but the extraneous circumstance that the employee needs to get a prescribed sum of money to ensure her subsistence, health and morals.' The U.S.A. Fair Labour Standards Act of 1938 does not admit a minimum wage for women lower than that for men, and the same practice is adopted in Russia, Great Britain, Australia, New Zealand and South Africa. In France the minimum wage policy was first adopted as covering only women workers in the clothing industry by the Act of 10th July, 1915. But the scope was subsequently extended in order to include male workers as well, by the Act of 14th December, 1928. In the U.S.A. the state minimum wage laws passed since 1912 were also limited in their scope to women and minors of either sex under 18 years in the various occupations.

In India, the minimum wage policy should similarly begin with laying down minimum wage rates for women as well as for minors between the ages 13 and 17, which is the age of majority in the eye of the Factories Act (XXV of 1934) whereas below 15 years is the period of childhood. Now the Children's Employment Act, passed in 1938 and subsequently amended in 1939, lays down that no child who has not completed 12 years shall be employed in certain types of workshops such as mica cutting and splitting, shellac manufacture, bidi making, carpet weaving, etc. It is necessary to eliminate what are called sweat shop wages for all children workers by laying down the minimum wage rate for them.

We are here considering the principles of minimum wage fixing. What minimum will be fair and reasonable will be considered later, and in relation to the minimum wages for men.

Abridgement of Gap Between the Minimum Wage and Current Wages

An Indian Minimum Wage Act should be passed by the Government of India serving as an incentive to fair labour

standards in the Provinces and States as well as to greater uniformity in this type of legislation. It should lay down a general national minimum based on the assessment of the essential requirements of husband and wife and the average number of dependants living with them in the families of the lowest paid class of industrial workers. The methods of such assessment have been already indicated.

On the basis of the dietetic, clothing, housing and other norms adapted to the requirements of the Indian working class, we have estimated the norm of Rs. 30 per mensem at pre-war price level, or Rs. 90 at the present level, for the average family unit in Northern India, which should be implemented by the minimum wage regulations.

Now the minimum wage policy of a country is usually interpreted in the background of the standard of living at present enjoyed by workers in the same region or in similar occupations, and of general economic conditions and the capacity of industry to pay, and is applied in a way to avoid dislocation of industry as well as net reduction in employment. In Australia, for instance, in spite of the fact that the Commonwealth Basic Wage Commission of 1920 adopted a minimum wage rate which satisfied a fair and reasonable standard of comfort of workers, that wage rate was not adopted as the basis for wage awards, since it was considered to be well beyond the capacity of the industry to pay. Thus the wage fixing authorities in Australia have throughout, almost without exception, refused to declare a living wage differing in any marked degree from current ruling rates of wages.

The gulf between the estimated norm and the current wage rates in India is even wider than in Australia and industrial countries in the West and cannot be easily abridged. This will be amply evident from a survey of the wage level of unskilled workers, men and women, engaged in various types of industrial undertakings of Bihar.

In the jute mills in Bihar, in Katihar and Samastipur, spinners used to earn only Rs. 4 per week, and weavers Rs. 5 to Rs. 7 per week of 54 hours in the pre-war period. The unskilled workers used to obtain only Re. 1-4 and 1-10 per week.

The following table shows the unskilled workers' wage level in different types of industrial establishments in Bihar, 1938-39.¹

TABLE LXXIV
Monthly Wages of Unskilled Labour in Different Kinds of Establishments in Bihar, 1938-39

Industries	Over Rs. 5			Over Rs. 10
	Rs. 5 and below	and upto Rs. 10	and upto Rs. 15	
Cement, Lime-stone, etc.:				
Men ..	..	..	2	8
Women ..	..	..	6	..
Mica:				
Men ..	..	1	3	2
Women ..	..	2	2	..
Coal:				
Men ..	..	..	5	7
Women ..	..	..	7	1
Rice, Dal, Oil and Flour:				
Men ..	..	1	5	..
Women ..	..	1	1	..
Workshop:				
Men ..	..	..	3	11
Women ..	..	..	7	..
Public Institution:				
Men ..	..	..	3	..
Women ..	..	..	..	..
Tea:				
Men ..	..	1	1	..
Women ..	..	2	..	..
Electricity:				
Men ..	..	..	1	2
Women ..	..	..	..	..
Sugar:				
Men ..	..	..	14	2
Women ..	..	..	..	..
Metallurgical:				
Men ..	..	..	2	6
Women ..	..	..	4	3
Miscellaneous:				
Men ..	..	..
Women ..	..	..
	Total	8	66	42

1. Report of the Bihar Labour Enquiry Committee, Vol. I, pp. 168-169.

The modal rate of wages in Bihar is between Rs. 9 and Rs. 10, 45 establishments paying below and 44 paying above the modal rate. Unskilled workers are, however, at the bottom of the economic ladder. The average earnings of workers in an industry are higher. Also, in Bihar the wage scale is about the lowest in India. But even the average monthly wage, industry by industry, for the whole country will be found lower than the minimum wage of Rs. 30 we have set up, as shown below:¹

TABLE LXXV

Industry	Average Monthly Wage, 1939
	Rs.
Wood, Stone and Glass	16.1
Chemicals and Dyes	20.4
Engineering	21.9
Hides and Skins	23.8
Textiles	24.4
Paper and Printing	27.7
Ordnance	30.1
Mints	30.6
Minerals and Metals	38.1
Miscellaneous	23.4
Average	23.95

Manner of Implementing the Minimum Wage Policy

But there is nothing very unusual in such a wide gap between the standard of the minimum wage and current wages. For even in Great Britain where the average wage of industrial workers is 15 to 20 times greater than the industrial wage in India, Sir John Orr's well-known investigation has shown the marked deficiencies in terms of his norms for a considerable proportion of the British working class. Thus in India a cautious but systematic beginning has to be made in laying down minimum wage standards. This can be best done in the following manner:

1. By grading the wage regulations gently so as to prevent abrupt change of economic conditions. The Indian

1. Deduced from the Indian Labour Gazette, December 1943.

Minimum Wage Act may set a general minimum of Rs. 20 per month for its first year, Rs. 21 in the second year, and so on until at the end of ten years the norm is to become Rs. 30. As in the Fair Labour Standards Act in the U.S.A. the minimum wage fixation may be linked in India with a statutory reduction of hours of work. Thus the maximum hours of 53 per week in the first year of minimum wage regulations will be reduced to 52 in the second year, 51 in the third year, and so on until 44 hours per week are reached in the tenth year. It is expected that during a decade most industries will adjust themselves. On the other hand, if industries show at the end of five years by overwhelming evidence that the enhanced wage would throw many persons out of work, they will be allowed to pay less than Rs. 25 as the lowest wage for the unskilled workers, but not less than Rs. 20 per month.

2. By introducing flexibility in the minimum wage regulations through the establishment of a Government wage-fixing authority made up of public, employer and worker representatives, which will periodically conduct cost of living, family budget, and other enquiries for determining the minimum wages. Though this authority would permit variations in the minimum wage orders to meet changing economic conditions or special circumstances, the lowest rate of Rs. 20 established in the statute should not be overridden.

3. By limiting the scope of the minimum wage regulations for the present to municipalities with a population of over 20,000 persons. Workers come to work in the small towns usually from their village homes. Their cost of living is low, while industrial wage in their case supplements their chief source of livelihood from agriculture. For the sake of quickening the pace of industrialization, agricultural industries which do not employ labour for more than a few weeks at a stretch should be treated on a par with agriculture. Agriculture and occupations incidental to it, like dairying, the processing of agricultural products, fishery and related industries, should be outside the scope of minimum wage regulations.

4. By adopting differentials for different industries on the basis of their capacity to pay and their economic conditions

—provided that the general national minimum of Rs. 20 for the lowest paid workers is adhered to. The wage-fixing authority will decide differentials for the various industries and for individual establishments within an industry. Thus exemptions could be granted to single units.

In the U.S.A. Fair Labour Standards Act, 1938, which comprises the minimum wage regulations, there is provision for granting exemptions to particular industrial establishments from the minimum wage norm and for deciding differentials between the competing groups within a certain sector of industry by considering transportation, living, and production costs. On the other hand, in a protected industry it is expected that workers should share in the benefits of protection, and thus the differential for a protected industry should be guided by the consideration of the special interests of labour these deserve.¹ The plantations will present a problem of minimum wage of their own, and will have to be treated by a different kind of minimum wage regulations. Here both the consumption and the work unit is the family. The earnings of the husband, wife and children will all have to be taken into account in fixing the minimum wage on the garden, while the cost of living enquiry will have to reckon the concessions in respect of fuel, timber, monetary advances and plots of land granted to the workers on the plantations, which also vary from region to region. The Government of Assam have calculated the average family of a tea-garden labourer as consisting of one working man, one working woman, about three-tenths of a working child, one non-working child and about two-tenths of an adult non-working dependent.² The method of fixing the minimum wages through the basic and standardized piece rates has been already considered in a previous chapter. On the other hand, in the railways and in the transport industry in general, employing more than 2.3 millions of persons of whom 712,364 are railway servants, minimum wage regulations can be most easily adopted. On the railways, in navigation, in tramways and omnibus services

1. This principle is recognized by the Indian Tariff Board. See for instance, the latest Report of the Indian Tariff Board on the Sugar Industry, 1938.

2. Report of the Royal Commission on Labour, Evidence Vol. VI Part I, p. 19.

and in the postal and telegraph services, jobs and job rates are standardized, and thus if the minimum wages for the unskilled workers be prescribed, these might form the basis of fixation of the standardized rates for the higher grades of employees. In 1929 it was found that for about one-third of railway servants, the average monthly earnings were Rs. 18. There were deductions of wages between 1932 and 1934. But in 1941 and 1942 the Railway Board sanctioned dearness allowances on an extensive scale. Even now for workers who were drawing a salary of Rs. 8 per month, the increment of wages due to dearness allowance does not, however, assure them a living wage at all. The transport industry has stronger trade unions such as All-India Railwaymen's Federation and All-India Postal and Telegraph Union, than any other organized industries in the country, and already a machinery has developed for the discussion and settlement of grievances of workers with the Government of India, which should be utilized for implementing the minimum wage policy.

5. By adopting differentials for small towns with less than 20,000 persons, i.e. lower minimum wage rates based on the cost of living of semi-urban workers, provided that the industry even though operating for a season employs more than 50 workers. The wage-fixing authority might prescribe in small towns a minimum wage for unskilled workers less than the statutory rate of Rs. 20 on the basis of the study of cost of living, economic conditions and capacity of industry to pay.

6. By fixing lower minimums for women and children workers, apprentices and handicapped workers. For the women and children workers, the norms should be as follows:

Women	Rs. 16 to Rs. 25
Children	Rs. 10 to Rs. 15
Apprentices	Rs. 12

Where a lower minimum is fixed for apprentices it will be necessary to define the period of apprenticeship in the wage regulations.

In the present Indian labour situation, the approach to a national minimum should be gradual, and extended over a

number of years to prevent economic unsettlement and by way of prescription of a minimum wage for unskilled workers which will be applicable to all industries established in municipal towns of more than 20,000 inhabitants. There should be differential rules for industries in small towns with less than 20,000 persons. There should be age and sex differentials or lower minimums for women and children. There should also be industrial differentials, i.e. different minimum wages in different industries fixed at a point as close to Rs. 30 as can be done without substantially reducing employment. Finally, there should also be flexibility in the application of the minimum wage regulations, which would not establish specific minimum rates, but instead provide the machinery by which these are to be established, or varied to meet changes in the cost of living or in economic conditions generally. All industries, seasonal or perennial, should have an opportunity to present their case before the Governmental wage-fixing authorities for the revision of the minimum rates between Rs. 20 and Rs. 30. Such revision should never, however, be permitted to fall below Rs. 20. As the minimum wages for the unskilled workers are fixed, these would form the basis for fixation of the various occupational minimums, or of standardized rates, industry by industry. Thus the entire wage structure of the country will be linked to the minimum wage by a system of differentials for various kinds of skill, together with allowances for disagreeable, dirty, or hazardous work, as well as industry or 'prosperity' allowances that would be granted to workers in an industry particularly prosperous at the time.

During war time the abnormal rise of prices, the improvement of the quality, precision and speed of production, and the prolongation of hours of work, especially demand that a definite wage floor should be established for safe-guarding the worker's health, efficiency and a fair standard of comfort. But the case for minimum wage regulations is even stronger now due to the prosperity and high profits of most industrial undertakings, not to speak of the war industries. In many undertakings the technicians and skilled workers have obtained increments, but this has increased the existing gulf between

the wages of unskilled and semi-skilled and of skilled workers. In the system of wage regulation in Australia, New Zealand and the U.S.A., the spread has been reduced between the bare minimum wage and the minimums for skilled workers based on calculations of margins for skill of various kinds. In Australia, apart from the basic wage, wages of all classes and categories of workers are regulated by decisions of various courts of arbitration. The wage also varies according to years of service, not necessarily with the same employer. In India, on the other hand, not only the gap between wages of the unskilled and skilled workers, but also that between wages of skilled workers, and of the higher clerical occupations, of these latter and the salaries of overseers, foremen, technicians and the supervisory staff are all extremely wide. In certain establishments the manager's and superintendent's salaries are more than 200 times the average wage of the unskilled workers. Such a considerable spread in India will have to be reduced by the progressive increase of the unskilled and skilled minimums, and reduction of the unreasonably high differentials in sheltered, 'soft' occupations. It is in this manner that the national minimum will be increased gradually, taking into consideration the improvement of health and efficiency of the workers and what the industry can bear. Differentials will be permitted only where they are necessary for preventing serious injury to the industry and consequent economic unsettlement—avoiding, at the same time, any encouragement of a continuous subsidy from the workers to the industry, to the detriment of their health, efficiency and general well-being. Thus fair and reasonable standards will be established for decent civilized existence of the Indian working class as the common denominator for Indian industry.

CHAPTER XIII

RATIONALIZATION AND INTENSIFICATION

Machine and Society

The progress of industrialization on modern lines in India will largely depend upon methods of economy and efficiency in mass production which may bring down both costs per unit and prices of manufactured products, so that the latter may be brought more and more within the range of the purchasing power of the Indian agriculturists. Cheaper clothes, cheaper corrugated iron sheets and cheaper cigarettes will be a boon to the Indian masses. At the same time, rational methods of technique, processes and organization which may secure the minimum waste of labour, raw material and power, lead to a general rise of wage level and reduction of hours for industrial workers. Thus rationalization alone holds the key to the successful social utilization of machines by men. Conversely, the continuation of old plants, traditional processes and empirical improvisations are fraught with the risks, under the present conditions of world competition, of inefficiency in production which implies high costs and prices and bad quality of products, contributing in the long run to permanent reduction of wages and of unemployment in the country. Machines may thus work not towards uplift but the reduction of the standard of living of the people, if these be not constantly renovated and revised by the methods of science and human engineering. It has been well observed: 'The machine raises the output, multiplies our wants and creates more leisure. A working class enjoying sufficient leisure and earnings adequate to keep up with the speed of the machine can make the machine a blessing to mankind, a vehicle of higher civilization. An under-paid unhappy working class will cause the machine to work havoc in society.'¹

1. Quoted in "The Social Aspects of Rationalisation" (I.L.O.), p. 222.

From an Unskilled Worker to an Expert Mechanic

That the Indian industrial worker who is often treated by the employer as a part-time agriculturist can rise to his full stature as machine-tender, comparable in his efficiency to his compeer in the industrial countries in the West, is not generally recognized. It is from the ranks of unskilled workers in the factories who have come from agriculture and village crafts that the skilled workers in various categories have been drawn, and these now form quite a considerable proportion in India, estimated at 26.9 in 1921 and obtaining wages higher than the rate for unskilled workers. A few concrete instances from different industries may be adduced. Many women workers join the cotton mills in Bombay as half-timers drawing only Rs. 4-8 a month, then pick up skill and are admitted as full-time workers earning Rs. 25 a month within three to five years. Boys begin as half-time doffers earning only Rs. 3-8 a month and become full-time workers in the same department earning double the wages within the same period. Then they become siders in the throstle department and may end as doffer jobbers earning Rs. 50 a month within another five years. Similarly in the jute mills in Bengal a boy starts as a shifter earning Rs. 4 a week, very soon becomes a spinner and, learning weaving by going in his recess to the Weaving Department to help his associates from his own village, ends as a skilled weaver, earning Rs. 10 a week. Or he joins the jute mill as a drawing feeder earning Rs. 4-8 a week, then changes into a rover within a few months earning Rs. 5-12 a week, and then becomes a drawing sardar with an income of Rs. 8 per week. Finally, in the course of two or three years he may become a head sardar, with weekly earnings of Rs. 15. A head sardar in a jute mill may earn even as much as Rs. 45 a week, getting twice as much as a babu in the department and there is discernible a distinct improvement in his standard of living. He acquires a harem while his influence over his clientele of workers can assist the management materially and quickly at times of labour shortage, though it may be a cause of grave apprehension to them during an industrial dispute. Usually the sardar rises from the ranks and carries his dominance from his department in the mill to his bustee or

neighbourhood, where live most of the workers recruited by him from his rural area. The sardar's son can also more easily become a sardar himself, the management favouring the principle of heredity though of course, he enjoys a unique advantage in training for skilled jobs of various categories. Many khalasis in the engineering works begin as unskilled workers on 8 as. to Re. 1 per day, but pick up skill and responsibility to become excellent mechanics and fitters, earning Rs. 3 to Rs. 3-10 per diem.

Not only has the industrial efficiency of Indian workers steadily developed all along the line in recent years, but in some fields they have achieved superb results. Weavers in some mills in the Bombay Presidency have already begun to mind 6 looms, and their average individual output has already reached 85 per cent of the output of the Lancashire workers in spite of inferior working conditions. But the results in the Tata Iron and Steel Works are even more striking. Here the labour co-efficient has been estimated to reach about 75 per cent of European and American efficiency in some departments, writes Harold Butler. In the Bar Mill, S.B.B. Mill, the European rougher used to get Rs. 2,400 per mensem while the Indian rougher earning from Re. 1-4 to Rs. 7 per diem, is doing his job almost as efficiently. Similarly the European roller in the Merchant Mill, S.B.B. Mill and Plate Mill used to get Rs. 1,200 per mensem while the Indian worker's wage for the same job is now only Rs. 5-8 to Rs. 10 per day. Many foreign workers as fitters used to get Rs. 600 per mensem, and nobody could imagine that Indian workers would be able to do similar jobs for Re. 1-8 to Rs. 3 per diem. In the Electric shop of the Indian Cable Company, Golmuri, we have aboriginal women as armature winders who have acquired a degree of technical skill that extorts admiration. It is probably with reference to them that the Duke of Gloucester recently observed that there he saw Indian women at the machines, performing skilled tasks like their sisters in war time in England. The present writer was astonished during his visit to the Tata establishment to see a woman control driver at a crane in charge of her skilled and responsible task. She was obtaining a wage of Re. 1 per diem. The Duke of

Gloucester's comment is worth quoting: 'No one can fail to be impressed by the splendid work which is being done at the great steel and armament factories of Tatanagar which I was privileged to see. The enterprise of the men who founded that industry, and the skill and vigour of its workmen are a good augury for the industrial future of India.' One more testimony may be adduced. This is from the Manager, Kumardhubi Engineering Works and Eagle Rolling Mills who has remarked thus in respect of the accuracy and sense of responsibility of the better class of the Indian workers which have definitely improved: 'Our machine shop is a department which stands out head and shoulders. Now, we have got at least 20 per cent of the men who can use the micrometer and know what it means to machine to 1/2000th to 1/3000th of an inch and can do it as people in England can. They thoroughly understand accurate work.' The degree of accuracy to which an Indian craftsman can work even with indifferent, out-of-date machinery is nothing short of astonishing. W. H. W. Urquhart, visiting a workshop in India one day in the early stages of war production with the idea of checking over finished base plates with a micrometer graduated to 1/10,000", describes his experience thus: The head mistry was very interested in the proceedings, but not impressed with the micrometer. A considerable number of base plates were checked over and all found to be the same diameter within 1/1,000". On being asked the secret of such accuracy the mistry produced from the folds of his clothing, his set of 'master' gauges. In appearance they resembled bits of wire and hairpins. With reluctance he allowed them to be tested by micrometer. The degree of accuracy was found to be very fine indeed. How and when they were made was not divulged, but the secret of accurate workmanship lay in the fact that each operative had to submit his gauges to the head mistry twice a day for check against the 'master' set.¹ The great problem of Indian industry is in the first place to utilize the hidden talents and sense of responsibility of Indian workers who can perform as hazardous, accurate and responsible tasks as European workers, and at much lower wage rates; and in the second

1. India at War, "Statesman" Supplement, Dec. 10, 1941.

place to rationally share the gains from rationalization or intensification as between the workers and the employers.

Efficiency and Talents of Indian Workmen

'Indian workmen', observes C. W. Casse, 'are first-class mechanics capable of competing with any in the world. India has its own methods, its own tools and processes, which may differ from those employed in other countries. Our miseries sit on the ground rather than work standing at a bench; sensibly they prefer to pull a saw rather than push it, and they want someone to help them; but although these characteristics may seem peculiar to many from the West our workmen are no less skilled than their foreign brethren. It is for the Indian mechanical engineer to make the best use of indigenous methods, applying them to suit modern production. Indian workmen can be trained, and by organization and proper supervision all modern productive methods can be mastered. What we lack most in India is skilled and experienced supervision; we have not had sufficiently long experience of manufacture to have produced enough skilled foremen of the type of which so many are available in England and other more mechanically developed countries.'

During the war time an elaborate scheme of training several thousands of skilled workmen and foremen for Ordnance factories and railway workshops has been launched. The aim is to train 48,000 skilled workmen, and about a hundred British instructors have been brought from England. These along with a number of 'Bevin Boys' are giving intensive and specialized training to the workmen in 353 centres which have been organized for this purpose. The result has exceeded all expectations. Within four or six months Indian workmen have shown their capacity to work to precision limits, and fitters, copper and tin-smiths, turners, machinists, blacksmiths, electricians and electro-platers are being produced in thousands with as much proficiency as that of British workmen in engineering and metal works. Such opportunity for specialized training in handling up-to-date machines in the workshops has never presented itself before the Indian semi-skilled and skilled workmen, and the manner in which

their brains and muscles have responded is an excellent augury for India's post-war industrial advance.

Even without new training of a specialized kind Indian skilled workers have shown remarkable technical skill and adaptability in the war production. Hereditary artisans have been able in several lines to contribute to the great stream of war production, bringing their craftsmanship up to mass production standards. Jewellers who for generations were working on gold and silver are now drawing fine lengths of the 'base' copper for motors and dynamos. Metal workers who were making swords, scimitars and other artistic implements or utensils are now producing surgical instruments and cutlery. Watch-makers are repairing complicated instruments of aircraft. A section of an Ordnance factory in India has been given over exclusively to repair of aircraft mechanisms. Most of the mechanics are watch-repairers. But now in this Ordnance factory they strip to the last screw the insides of very complicated aircraft instruments, repair and refit them, or replace vital parts. The value of this factory lies in the utmost expedition with which these repairs are carried out in India without waiting for new replacements from abroad. Some 400 to 500 instruments are regularly repaired in this factory every month. These delicate instruments demand very high skill in maintenance and repair. With reference to the ordinary Indian workers, we may refer to the testimony of the Agent, Calcutta Tramways Co. Ltd., that was adduced before the Royal Commission on Labour more than a decade ago:

'As one grows older in the country one becomes amazed at the amount of work the ordinary Indian worker can do on the food one knows he lives on and the conditions under which he exists. There is extraordinary strength in most of the miserable specimens one sees doing manual labour, but the limit of physical performance (say weight lifted at a single effort) is less by 30 per cent than the pre-war British working man, and his speed of effort is certainly less by the same amount. I would put him down at about half or less the worth of the corresponding European labourer of the more virile countries.' It is estimated that while the Punjabi worker loads 15 tons

daily, a European worker loads 20 to 25 tons and an American worker up to 30 tons.

This difference is largely due to the small body size and weight of the Indian workers due to factors of race, diet and environmental adjustment. The standard weight of a European working man is 70 kgs. or 154 lbs. The following would represent the average weights of workers in the different Provinces in India:

(1) Punjabi and U.P. worker ..	150 lbs.
(2) Telugu ..	140 "
(3) C.P. ..	120 "
(4) Bengali ..	116 "

The average weight of the Indian worker may be estimated at 55 kgs. or 121 lbs. The inferior weight which can be only partially eliminated by improvement of diet accounts for the lower physical performance and endurance of the Indian working man. The better class of Indian workers is, however, able to keep pace with developments in machine-tool making and shows the same degree of efficiency as the European worker. Reduction in the number of working hours per day succeeds in making this class more efficient, and the introduction of organized rest-pauses has also the same effect. But where the operations involve a good deal of heavy and arduous work, the Indian worker being of lesser physique cannot work as fast or continue as long, and a greater number of workers are required. The Indian workers, especially the better grades of them, can exploit the full gains of rationalization and efficiency methods, provided that these be not introduced without heed to their working conditions, health and welfare.

Rationalization in the Textile Industry

As in many industrial countries of the world, the necessities of economy and of improvement of the skill and efficiency of workers through the use of labour-saving devices and standardization both of materials and products, led to the introduction of rationalization in India on a limited scale during the period of economic depression. Since then the sturdy opposition to rationalization plans by the most powerful and representative labour organization in India, viz. the Textile

Labour Association, Ahmedabad, has brought to light the serious defects and drawbacks of rationalization in practice in different fields of Indian industry. We shall consider in this connexion the problems of rationalization in the fields of textile, engineering and tobacco industries as roughly indicating the safe-guards which are necessary in order that the process of rationalization may not jeopardize the legitimate interests of the workers.

In respect of the textile industry the Tariff Board stressed as early as 1927 the need of improvement of efficiency and output per worker in India. It pointed out that the number of spindles looked after by each operative in India was 180, while in Japan it was 240, in England 540 to 600 and in the United States 1,120. The number of looms attended to by one weaver in Japan averaged $2\frac{1}{2}$, in the United Kingdom 4 to 6, in the United States 9, while in India it was usually 2.¹ The Report of the Cawnpore Labour Enquiry Committee puts it in the following manner, with reference to Cawnpore conditions: 'There are for every 1,000 spindles 6.1 operatives in Japan as against 15 in India, i.e. an operative in India will look after one side of a spinning frame whereas in Japan a girl will be minding 3 sides. As for weaving, a girl weaver in Japan looks after 6 looms while our weaver minds about 2. Regarding the famous Toyoda automatic looms, an operative will look after 50 such looms with 95 to 96 per cent efficiency. The weekly wages per worker in yen in 1932, in Japan, for 20S counts yarn, was 5.8 as against 9.07 in India. The weekly wage bill per 1,000 spindles in Japan was 35.3 yen and in India 136.1 yen.'

Such comparisons of efficiency and wages, however, are rather misleading; for they do not take into consideration the fact that, apart from the effects of climate and unsatisfactory housing conditions, obsolescent machinery and plant and unsatisfactory working conditions lead to inferior work and less work in India. It has also to be remembered that the average life of Japanese girl workers in a mill is only three or four years. Scientific management and improvement of material and conditions of work are expected to bring the average out-

1. Report of the Indian Tariff Board (1927), Vol. I, pp. 136-37.

put of the Indian textile workers nearer that of the Japanese working girls. Much machinery is rendered superfluous and the work appreciably reduced in the spinning section of the Japanese textile industry through the introduction of combined blowing room machinery, high drafting and other minor methods; but it is the weaving department in the Japanese cotton mills which is considerably better equipped and managed as compared with the Indian. Improved methods of winding, high speed warping, automatic drawing-in and twisting and automatic looms have revolutionized existing methods of working in Japan during the last two decades. Finally, efficiency in the weaving department is connected with the supply of faultless beams from the sizing, the winding and warping departments of the cotton mill. Rationalization implies not only the introduction of efficiency schemes in the several departments of the mills but also improved co-ordination and supervision. In the last resort the efficiency of Indian textile workers also largely depends upon the efficiency of jobbers, departmental heads and mill managers.

All this clearly indicates the need of rationalization, if the Indian cotton mill industry is to compete successfully with Great Britain and Japan from which India imported about 206 million yards and 475 million yards respectively in 1938-39. Japan does not grow cotton at home and depends upon foreign markets. For the sale of her cotton goods India has the tremendous advantage that she grows cotton at the thresholds of her mills while she has a vast internal market to exploit, which, moreover, will expand with cheap production. The situation certainly calls for reduction of costs and measures of efficiency, department by department, in the Indian cotton mill industry.

So far, rationalization has been introduced only in the Bombay Presidency and even here it has progressed only in Bombay city and Ahmedabad, more in the former than in the latter. The departments which have so far benefited from important efficiency systems are ring spinning and weaving. In Bombay city about half the number of workers of the ring spinning department work on the double side system. Their number comes up to 3,857. In Ahmedabad the corresponding

number is 2,002. Efficiency methods have also been introduced in Bombay through allotting two hopper feeders, two scutchers and two roving frames per individual and two men to mind three heads of drawing. It is, however, in the loom-shed that the greatest progress has been achieved. 556 weavers mind three looms per head, 2,716 weavers mind four looms per head, and 501 weavers mind six looms per head in the cotton mills in Bombay. In Ahmedabad rationalization in weaving has not progressed. The two loom system is still normal in this centre. This has been mainly due to labour's persistent opposition. The Textile Labour Association contends that, having regard to the quality of the raw materials used for the manufacture of yarn, it is neither possible nor practicable to adopt rationalization on coarse counts. With regard to weaving, it emphasizes that any attempt to proceed with rationalization is bound to fail on account of the varying sizes of the looms in a single shed and the countless types of cloth that are being woven in a single unit. It also points out that the efficiency scheme will lead to considerable unemployment.¹ In Sholapur, there is very little rationalization. Whatever little there is, is confined to the ring spinning department, where 115 workers work on the double side system.

Outside Bombay and Ahmedabad there are practically no efficiency measures adopted in the rest of the cotton mills in India. Wherever these have been introduced, better and more work has, however, been the result. In the Empress Mills at Nagpur work has been expedited, and the general efficiency of the workers has increased due to the introduction of vacuum-stripping plant, automatic looms and ring spindles in places of mules and throstles in the spinning department. Spinning production has been estimated to have doubled since the adoption of the ring spindle. Eccle's drop-boxes have also given better results than Hacking's drop-boxes. The ventilating and humidifying systems, which bring down the temperature in Nagpur by about 30° during summer when the thermometer rises up to 116°, have increased the evenness of yarns and also weaving production.²

1. Report of the Bombay Textile Labour Inquiry Committee, p. 191.

2. Royal Commission on Labour, Evidence Volume III, Part I, pp. 90-91.

In the cotton mills at Cawnpore it appears that the speed of the machinery has been accelerated. The Cawnpore Report mentions that some mills have introduced high draft system in ring spinning, self-stripping devices on cards, and high speed winding and warping machines in their preparatory processes. But this is not rationalization though the Committee regards it as such; it is only intensification.

In the jute mill industry of Bengal the sudden increased demand for jute products during war time and shortage of trained labour have contributed towards the employment of less number of shifters on the spinning frames, a squad of about a dozen being reduced to ten or eight, while their wages remain the same. This has been a chronic evil especially because under-age boys are usually employed as shifters against the Factory Act and the wage scale is also reduced. The reduction of the squad is left largely to the decision of the sardar who earns something out of the intensification of labour. There have been discontent and even strikes on this score.

The Vogue of Intensification

In 1934, a special committee of the Bombay Millowners' Association reported on the introduction of efficiency schemes and the wages which should be paid under new conditions. The Committee also considered the conditions which should be provided for the various occupations prior to the introduction of efficiency measures. Their recommendations should be considered by cotton mill managers throughout India for taking steps for introducing rationalization measures in individual mills with appropriate safe-guards.

The crux of the problem of rationalization is a fair and reasonable division, between Labour and Capital, of the increase in the earnings of industry which accrues from the reduction of the unit cost of production. Rationalization implies the investment of more capital in highly mechanized plants, which leads to a more than proportionate increase in output. Labour can legitimately claim its share in this increase, since greater toil, speed and alertness are necessary to work the new types of tools and machinery. Now, in India,

it is often the case that instead of introducing a completely new machine or process, the old plant is simply renovated and the speed of the belt-line considerably increased. There is no improved arrangement of the machine, no improved planning of work, no standardization or improvement of materials, and no better supervision; there is only an increase in the pace at which the work is done. Thus intensification is coming in the guise of rationalization in India. In the textile industry the two-sides system—a worker minding two or more sides—is introduced into ring spinning without improvement of the quality of cotton or of wages. In the roving department the system of one man per two rovers is introduced without, however, maintaining an adequate complement of doffer boys. In the loom-shed a two to four-loom system is adopted without altering much the lay-out of the machinery in the shed, without any additional help by way of weft-carriers and cloth-carriers, and without an adequate increase in the piece-rates.

In the cotton mills in Bombay and Ahmedabad the speed at which machinery is run—8,500 to 9,500 revolutions on the belt drive, and 6,000 to 12,500 revolutions on the individual motor drive in the ring spinning department—is greater than even in the U.S.A.¹ This explains why the number of spinners in the Indian cotton mills is larger than in western countries, and it is, therefore, grossly unfair to underrate the efficiency of the Indian spinner by comparison with his Western peers under such adverse mechanical conditions. Such increase of the working-tempo obviously tells upon the health and alertness of workers, causes accidents, and increases the number of breakages in the yarn. Similarly high speed winding and warping machine processes increase the pace at which work is done and impose on the operatives too great a strain, while at the same time they lead to wastage and breakage. These are all cases of intensification with which rationalization is too often identified by employers in India, and which compels the labour force to work harder or faster or more continuously than before within the same normal hours of labour, but without proportionate increase of wages and relaxation necessary. In the U.S.A., the textile workers have long com-

1. See Report of the Bombay Textile Labour Enquiry Committee, p. 200.

plained at the increase in the working-tempo which is set by managements, and in the automobile industry the friction between men and managements over the speed-up of the belt line has often resulted in recent years in 'quickie' sit-down strikes.¹ In India mechanization often accompanies both retrenchment and intensification, against which the workers cannot defend themselves due to the absence of a strong labour organization; while there is on the whole little systematic attempt at improvement of the atmospheric conditions of the factories. Yet such improvement where and when adopted has reacted very favourably on the workers' speed, alertness and efficiency. Bombay's air-conditioning of textile mills has certainly aided the progress towards rationalization. In Ahmedabad a sum of Rs. 40 lakhs has been spent on air-conditioning plants. In Bombay City where the climate is more suitable for technical processes in the textile industry than the hot and dry climate of Ahmedabad and Sholapur, major improvements have been made in at least 20 mills which spent sums varying from Rs. 20,000 to Rs. 66,000 on air-conditioning plants. Experience has shown that air-conditioning has not only improved working conditions, but also increased efficiency from 4 to 8 per cent with fewer breakages and more even conditions for the yarn and cloth.²

Need of Sharing the Gains of Rationalization between Management and Labour

What exactly should go to labour under a scheme of rationalization which reduces the unit cost of production must be left to collective bargaining, and depends largely on the strength of the workers' organization. Rationalization in the highly mechanized establishments of the West has satisfied both the employers' desire for greater profits and the workers' desire for higher wages, when the former have increased their capital investment and the latter have produced more units per day by working a little harder. Workers have not been deprived of their legitimate share in the increase of the profits of industry accruing from rationalization to the same extent.

1. Steen, Davis and others: "Labour Problems in America", p. 41.
 2. Statistics of Factories for British India, 1938.

as in India, due to the strength of organized unionism. In our country the absence of solidarity among the workers and of an effective labour movement makes it impossible for workers to obtain the legitimate increase in their earnings due to them on account of the adoption of efficiency systems. Efficiency measures have been introduced into cotton mills, as we have seen, more in Bombay than in Ahmedabad. But these have worked more smoothly in Ahmedabad due to the strength of the labour movement there, and the supervision of a Joint Rationalization Committee comprising representatives of the Millowners' Association and the Labour Union according to the Delhi agreement of 1935. In this city the gains of rationalization for the workers have been fixed as follows: workers in the spinning department get 45 per cent more for minding two sides in the case of counts about 28S in warp and 32S in weft and 47½ per cent more for counts below 28S in warp and 32S in weft down to 18S. It appears that this proportion was fixed not as a result of deliberate calculation but of collective bargaining, and the employers have contended that the percentage of 45 is too high and that not more than 15 per cent should be given. In Lancashire, it is understood, 17 to 20 per cent is given. In Bombay the percentage given for different types of rationalized work ranges from 33 to 50. But the workers complain bitterly of additional strain, of reduction in their number without improvement of raw materials and working conditions, and of inadequate increase in earnings in rationalized occupations. Besides, there is the spectre of unemployment connected with rationalized working on a large scale.

Intensification in the Engineering Industry

If Ahmedabad labour has to some extent shown the way towards a successful working of the efficiency system from the labour point of view, uncontrolled rationalization has led to a great many evils, especially in the engineering industry in India. This can best be illustrated by a reference to the working conditions and wages in the Iron and Steel Works at Jamshedpur, one of the most highly mechanized and specialized establishments in this country, employing about 30,000 workers. At this establishment there has been chronic dis-

content of the workers in the different plants and shops where production has increased per unit, but the numbers of workers have been drastically reduced, while there has not been a fair increase in the wage rates and sometimes even job rates have been reduced. In the Duplex plant, production increased from 35,000 tons in 1928 to 55,000 tons in 1937 and to 60,000 tons in 1938. But the number of labourers has been rigorously curtailed. Formerly there were 152 men in the plant but now there are only 112. In one shift there used to be 12 converters but now there are only 6. Similarly the pit khalasis have been reduced from 80 to 30. Besides, there is overtime work for which there is no extra payment. In this plant many workers have been getting Re. 1 to Rs. 2-8 per diem since 1929. There has been no increment in wage rates for increased production. The production bonus does not add appreciably to the earnings, forming about 14 per cent only of the total income of all workers in income groups of Rs. 50 and over. In the Open Hearth Department the personnel has been reduced from 120 to 90; for 10 years the khalasis here have been getting Re. 1. In the Blast Furnace Department work has considerably increased, but the number of fitters and khalasis has been reduced. In the Merchant Mills, mechanical section, the number of workers has been similarly reduced from 91 to 46; while the practice of obtaining assistance from General Construction has also been discontinued. Workers have to put in 2 to 3 hours' overtime without being paid for this because they have to finish their daily allotted tasks. Although production has greatly increased here, most of the workers have been getting the same wage since 1929. In the Sheet Bar and Billet Mill, production reached its peak in 1938, but many hands have been reduced, especially the rougher-khalasis. In this department there were many European workers who were earning very much higher wages. The present wage of the roller is Rs. 10 per diem; the European worker was getting Rs. 1,200 per month for the same job. The Assistant Roller obtains Rs. 3 per diem, and on an average earns a bonus of Rs. 8 per mensem, working full 8 hours at a stretch without any rest-pause. Besides, the workers doing the same kind of job in different shifts get different job rates; for example, plate-

sharing machine men obtain Rs. 3-4 or Rs. 3-8 or Rs. 5 per diem, resulting in discontent. In some sections, when some workers are absent the remainder is required to do their work as well. Rest-pauses are also inadequate and not given to all. Especially do the rougher-khalasis complain of the pace of work; they cannot even find time to answer nature's calls. Other instances where the number of workers has been reduced are: Gas Cleaning Plant, from 12 to 5 workers; Machine Shops from 48 to 15; Maintenance Department (electric), from 57 to 17—although two new plants have been installed and work has been extended. In too few shops is a spare gang of adequate strength maintained to avoid additional burden on the workers in the case of absence of some in the same group or category. In Agrico, production has considerably increased; here piece-wages are paid but the basic rate has been altered so as to compel more strenuous work. In the piece-work system the machine hour record is pitched up to such a high level that the earning of appreciable bonuses is unusual.

It is evident that it is only in few shops that the management has introduced labour-saving devices and mechanization to obtain larger output with less labour. Among those where rationalization has led to considerable economy of human effort is the Sheet Mills where Rs. 66 lakhs were spent for mechanization, and the output has doubled, at the same time causing an increase of the labour force from 1,592 to 2,403. But in the majority of shops there has been intensification of labour for which workers have not obtained benefits through reasonable increases of wage rates, while necessary rest-pauses are limited only to small sections of the labour force. The management admits that there has been an increase in the efficiency of Indian workmen. These have, indeed, replaced highly paid European workers in many jobs during recent years with incredible success. But the management at the same time considers that rationalization has nothing to do with the question of wages. This is certainly a perverse view which does not augur well for the increase of efficiency and output in the Indian steel industry.

What holds good in the Tata establishment is also true of the Indian Tin Plate Company's establishment at Golmuri

employing about 3,000 workers. Production has increased uniformly and considerably, but the operatives have been reduced to two-thirds and even to half in some departments without any change in the machinery or working conditions. Wages have also been reduced in the Hot Mill for catchers, doublers, fitters and helpers, from Re. 1-14 and Rs. 2-4 to Re. 1 and Rs. 2. Overtime is worked but not paid and off-time given instead. In 1937 the Labour Union put up a strong agitation against heavy intensification and succeeded in getting a few more men appointed in the Pickling, Cold roll, and Warehouse departments. Recently the Management have recruited some more hands for the Shearing and Opening departments. Even then complaints are persistent that men in some departments do not get time for meals and relaxation during 8 hours of continuous work, particularly when some men happen to be absent. In the Tin Plate Company no improved mechanization has been introduced since 1929. Therefore, making allowance for increased efficiency of workers and some increase in the total labour force, no factor is more responsible for such heavy increase in the production than intensification. The Tin Plate Workers' Union, Golmuri, has been strongly opposed to this kind of intensification which denies normal 'offs' for meals and relaxation and turns human beings into machines for non-stop production. The intensification has been highest in the departments from Shear opening to Cold roll.¹

In the piece-work system the standard level given to the skilled workers for the production of a certain tonnage has been raised higher and higher. Thus their earnings have gone down or they have been retrenched. Old skilled operatives earning Re. 1-4 have been retrenched and replaced by men who were started on 12 as. according to the new rate. As between 1930 and 1937 the average earnings of the 559 employees of the establishment have been appreciably reduced.

It is, however, in the cable industry that intensification has been at its worst. While production has increased by over 250 per cent since 1930, operatives have been reduced from 26 to 18 in the Crossley Block, from 4 to 2 on the Longitude Ma-

1. Report of the Bihar Labour Enquiry Committee, Vol. III, Part C, p. 78.

chines, 2 to 1 on the Larmuth Machine and Small Strand, and so on. Even allowing for efficiency resulting in per capita production, the Cable Workers' Union maintains, intensification has been in the proportion of 1 to 3.¹

A similar problem of intensification of labour without legitimate increase in wages has arisen in cigarette manufacture where almost every process from sorting and packing to filling and tin-making is done by machine processes. In both Monghyr with 1,800 operatives and Saharanpur employing about half this number, increase in the pace of work and reduction in the number of operatives have gone together, leading to chronic labour unrest and 'sit down' strikes. The Secretary, Cigarette Factory Workers' Union, Saharanpur, in his memorandum to the Labour Commissioner, U.P., complains that in recent years the speed and frequency of the Mollins and other machines of the cigarette making and packing departments and the Cutting Room, to mention only a few, have increased by at least three to four times. The output also has increased proportionately, if not more. The proportion of men employed in relation to output has, however, lessened. For instance, in 1930 the number of workers in the factory was over 1,800 and the average output a little above 100 million cigarettes. The number of men employed was subsequently reduced to nine hundred, while the output on an average rose to two hundred millions. The output till the date of the strike was still higher.²

There was a sit-down strike in Monghyr where there was similar intensification of work, and retrenchment. In one department, viz. tin-making at the Monghyr Factory the tempo of work was considerably increased while the number of men was reduced to one-fifth. On the whole there was a reduction of the number of workers in this factory by 40 per cent.

Controlled vs. Uncontrolled Rationalization

All such questions, viz. increase of output and wages due to greater skill or harder toil, increase of working-tempo, fatigue, need of organized rest-pauses, improvement of lay-out

1. Op. cit., p. 103.

2. The Cigarette Workers' Union, Saharanpur, Secretary's letter, pp. 7-8.

of machinery and conditions of work, and above all, unemployment due to rationalization, have to be considered from every point of view and the divergence of interests between capital and labour harmonized, before any scheme of rationalization can be worked smoothly and effectively. On the whole it seems necessary for the introduction of rationalization in this country that all efficiency measures should be considered, prior to their adoption, by a joint committee of representatives of workers and employers, with certain technicians as experts, to judge about the working conditions and the distribution of the gains of rationalization between labour and management. Not before this Committee is satisfied about the working conditions in a particular industrial establishment, the state of the machinery, quality of raw materials, capacity of the average worker, working-tempo, and rest-pauses as well as about increment of wages for workers engaged in different types of rationalized work, should any efficiency system be introduced. If a proportion of the labour force has to be retrenched on this account there should be agreement about the payment of some gratuity to these workers, who should also obtain at least three months' notice for discharge. Such workers should also have claims to be re-employed in the particular establishment at the earliest opportunity. The Committee will have to go also into general economic considerations whether the time is opportune for the introduction of rationalization and the pace of such introduction in a particular industry so as to minimize unemployment as far as practicable in the country. In the United States, complete lists of all kinds of labour-saving devices in all branches of production are maintained, and co-operation is sought between labour organizations and employers in order to mitigate the volume and effects of unemployment. During the war period special labour management committees have been developed comprising representatives of both labour and management, who have devised measures for increasing efficiency and eliminating waste. A recent writer has remarked in this connexion: 'The significant point is that these conditions represent industry's acceptance of labour participation in management problems.... The experience of the last four years has proved to an ever-growing group of the American

business community that a voice for labour in the decisions of management is actually profitable for all concerned.'

On the whole, rationalization has less disturbing effects in times of industrial prosperity when labour can be deflected into various fields of enterprise, though it is usually imposed upon a particular industry in a period of economic depression, calling for a drastic reduction of costs of production due to competitive conditions. The general rise of purchasing power in the country in relatively favourable times may lead to improvement of demand and of prices, causing expansion of the particular industry in which the efficiency system is adopted so as to reabsorb the unemployed labour force. In the case of such Indian products as cloth, corrugated iron sheets and cigarettes, of which the demand is elastic, the introduction of rationalization even in less favourable times will lower costs of production and selling prices, and thus the demand for such products will increase, entailing re-employment of the discharged labour force. Thus the long-range effects of rationalization will be cheaper production, larger consumption and greater employment. Such are the prospects of increase of wealth and improvement of the general standard of living which rationalization, well executed and adequately controlled, holds out for India. Directed solely by the interests of capital and finance, rationalization in India now introduces the vicious circle of retrenchment, intensification, attack on the normal standards of work and wages, and strikes. It leads to waste of capital and man-power and introduces such instability in the industry and bitterness in the relations between labour and capital as to postpone its successful adoption for a considerable time to come.

CHAPTER XIV

THE STANDARD OF LIVING

Wages and the Scale of Family Living

Since the Royal Commission on Labour regretfully commented on the lack of adequate statistics on the workers' standard of living, little progress has been made in the collection of

such data in the intervening decade. 'We find ourselves', observed the Commission, 'crippled by past neglect in this direction. The material available is inadequate as a basis of any complete treatment of the worker's ills. Even to such an elementary question as the extent to which the workers' earnings suffice to provide for their necessities no precise answer can be given.' So long as he does not get enough wages to obtain the necessities of life for himself and his family according to a scale his social *milieu* has decreed, the worker will not have the incentive to work. Wages serve as the spur to the worker who obtains thereby the wherewithal to satisfy not merely the bare requirements of living for himself and his family, but also certain conventional needs and luxuries and privileges incidental to his standard of living. The wage level and the standard of living are reciprocally inter-dependent. But wages are crucial. For low wages bring down the standard of living to the level of physical malnutrition and even social isolation. The poorest unskilled workers in India are not only under-nourished, but are also socially 'out-casted'. Both wages and the standard of living determine the efficiency of the industrial worker. Modern industrial communities show progressively higher scales of production and standard of living. In India, however, the conviction is strong among many employers that there is a fixed scale of living for the Indian worker and that an increase of wages would lead to idleness and dissipation of earnings in drink and extravagance. Thus an improvement in the wage level would in their opinion lead to diminution of output without conferring any economic benefits on the workers. Such a theory may be applicable to some groups of unskilled workers derived from the backward and depressed castes that are subjected to such social disabilities that improvement of their income does not arouse any ambition or initiative. Their general apathy and inertia are due to the handicaps and hardships of their village environment, which force them into industrial life. This class is fortunately getting smaller and smaller; even for the untouchables, a few additional rupees as earnings spur them to the desire for owning plots of land or houses of their own. For the great majority of industrial workers, the theory is obviously untenable.

We find as a matter of fact that workers belonging to the higher income groups, whatever the castes and classes they come from, show a definite tendency towards increased expenditure on various items that may be classified as luxuries for them. Family budgets derived from various parts of India show that what were luxuries yesterday in the plantations, mines and factories have become the necessities of today, and that the higher income classes in an industrial centre show a relatively smaller percentage of expenditure on food, clothing and other necessities, and a greater percentage of expenditure on the 'miscellaneous' items. More than that : in the several Provinces and regions which are more advanced industrially and where the wage-level is higher, the workers enjoy definitely a higher standard of living than in the rest of the country and this is clearly shown by their less proportionate expenditure on the necessities. In Bombay wages have shown higher levels and greater proportionate increases than in most parts of India and this is reflected in a progressive increase of the relative expenditure on recreational and educational items—which are particularly significant of the higher standard of living of the workers in that Province. Simultaneously there is discernible an improvement of the standard of efficiency. Thus some employers not only in Bombay but also in other parts of India feel justified in offering higher wages in order to secure greater efficiency from a better class of workers with a higher standard of living. The paradox is however nowhere more true than in India—that cheap labour is dearly paid labour. Many industrial workers in India are in fact employed on such low wage standards that any high standard of efficiency cannot be expected, since the plane of family living and expenditure touches the rock bottom.

The Indian Worker's Joint Family

In comparing family budgets and standards of living of workers in different parts of India, it is necessary at the outset to ascertain to what extent the workers maintain dependents who may be living with them or away from them. The permanence of the labour force may be roughly indicated by the relatively smaller proportion of absentee dependents. Table

LXXVI shows relatively small numbers of absentee dependents in Madras, Coimbatore, Sholapur, Ahmedabad, Jamshedpur and Nagpur, thus indicating that workers have settled down and have few relatives in their village homes. Certain centres show a large size of the family in the table—Bihar, Bengal, the U.P. and Madras. In these Provinces the joint family is stronger, and the worker has to support a larger circle of relatives than his compeer, say in Ahmedabad—where the average family comprises only four persons as compared with 6.75 in Jamalpur and Monghyr (Bihar). A recent enquiry (1938) into the family budgets of workers in organized and unorganized industries in Madras has shown that the average number of persons constituting a working class family is 6.03; in addition 0.18 per cent are dependent on the family. The prevalence of the joint family system among the Indian workers has not been adequately investigated but enquiries in Cawnpore and Madras have shown that 56.21 per cent and 77.22 per cent respectively of the families are found to be joint. In the Bihar coal-fields where the aborigines and semi-Hinduised aborigines dominate, the proportion of joint families comprising relations beyond the natural circle is much smaller, only 30 per cent.

Classification of Workers into Income-Groups

For comparison of family budgets from different industrial centres, it is also necessary to ascertain the proportion of workers that fall into the different income categories. Tables LXXVII A and B give a classification of working class families in several industrial centres of India by income groups. It shows that Ahmedabad has the smallest proportion (1.95 per cent) of working class families whose incomes are below Rs. 20 per month. The corresponding percentages for Jamshedpur, Nagpur and Cawnpore are 18.09, 87.2 and 69.7 respectively. As may be expected, the Bihar coal-fields show the largest number of workers who fall into the lowest income categories, the percentage of miners' families earning below Rs. 15 being 45.82. But if we take the proportion of working class families earning less than Rs. 20, the Cawnpore percentage (69.7) exceeds even that of the Bihar coal-fields. This is rather striking and throws

TABLE LXXVI
Average Size of Working-class Families in Different Centres in India¹

Locality and industry	No. of Families	Persons living in the family			Dependants living away from the family			Total
		Men	Women	Children	Total			
Bombay (1921-22), all industries ..	2,473	1.10	1.10	2.00	4.20	0.60	0.60	4.80
Sholapur (1925), textile ..	902	1.60	1.54	1.43	4.57	0.11	0.11	4.68
Ahmedabad (1926), textile and manual	872	1.36	1.21	1.30	3.87	0.13	0.13	4.00
Bombay (1930), textile ..	85	1.35	1.25	0.93	3.53	1.83	1.83	5.46
Madras, textile ..	79	1.86	1.73	2.23	5.82	0.06	0.06	5.88
Madras, printing and book-binding ..	50	1.66	1.60	1.66	4.92	0.04	0.04	4.96
Cawnpore, textile, engineering and leather ..	729	1.30	1.30	1.20	3.40	1.08	1.08	4.48
Coimbatore, textile ..	96	1.36	1.48	2.05	4.89	0.25	0.25	5.14
Lucknow, E. I. Railway Workshops ..	137	1.15	0.91	1.42	3.48	1.16	1.16	4.64
Corakhpur, B. & N.W. Railway workshops ..	161	1.06	0.48	0.63	2.17	2.79	2.79	4.96
Nagpur, textile and others ..	102	1.41	1.41	1.72	4.54	0.17	0.17	4.71
Jubbulpore, textile and potteries ..	67	1.13	1.10	1.34	3.57	—	—	3.57
U.P., railways ..	253	1.28	1.30	1.75	4.33	0.91	0.91	5.24
Bihar and Orissa, railways ..	213	1.23	1.43	2.18	4.84	0.69	0.69	5.53
Bengal, railways ..	156	1.16	1.11	1.51	3.73	1.53	1.53	5.31
South Indian railways ..	283	1.36	1.73	2.69	5.73	—	—	5.78
Jamshedpur ..	1,040	1.32	1.63	2.20	5.15	0.25	0.25	5.40
Bihar, coal-fields ..	..	..	1,030	1.21	1.95	4.34	In very few families	4.34
Jamalpur and Monghyr ..	..	..	445	1.69	2.06	3.00	6.75	Do.
Dehri-on-Sone ..	..	..	254	1.60	1.69	2.60	5.89	—

1. "Industrial Labour in India" (I.I.O.), p. 273; Report of the Bihar Labour Enquiry Committee, Vol. II, Parts A and B.

TABLE LXXXVII-A
*Distribution of Working-class Families According to Income-groups
 in Different Industrial Centres*

Income Groups	Families in Bombay		Families in Sholapur		Families in Ahmedabad		Families in Jamshedpur		Families in Cawnpore	
	No.	percent of total	No.	percent of total	No.	percent of total	No.	percent of total	No.	percent of total
Below Rs. 5	—	—	—	—	—	—	—	—	—	—
Rs. 5 and below Rs. 10	—	—	—	—	—	—	—	—	—	—
Rs. 10 and below Rs. 15	—	—	—	—	—	—	—	—	—	—
Rs. 15 and below Rs. 20	—	—	—	—	—	—	—	—	—	—
Rs. 20 and below Rs. 30	68	2.7	207	23.0	146	16.74	112	17.0	139	19.9
Rs. 30 and below Rs. 40	272	11.0	231	25.6	182	20.87	159	25.0	73	10.4
Rs. 40 and below Rs. 50	334	33.7	185	20.5	220	25.23	159	25.0	—	—
Rs. 50 and below Rs. 60	539	21.8	99	11.0	157	18.01	92	14.50	—	—
Rs. 60 and below Rs. 70	484	19.6	49	5.4	73	8.37	(Above Rs. 50)	—	—	—
Rs. 70 and over	276	11.2	56	6.2	77	3.83	—	—	700	100
Total	2,473	100	902	100	872	100	637	100	700	100

TABLE LXXVII.B

Income groups	Families in Nagpur		Families in Jamalpur		Families in Monghyr		Families in Dehri-on-Sone		Families in Bihar coalfields		Percent of total
	No.	Percent of total	No.	Percent of total	No.	Percent of total	No.	Percent of total	No.	Percent of total	
Below Rs. 5	..	—	—	—	—	—	—	—	—	—	2.03
Rs. 5 and below Rs. 10	—	17.5	—	—	4	3.30	44	17.3	135	13.10	
Rs. 10 and below Rs. 15	—	24.6	4	4.00	55	45.50	35	14.0	316	30.70	
Rs. 15 and below Rs. 20	—	25.1	20	20.00	30	24.90	46	18.0	241	23.40	
Rs. 20 and below Rs. 30	—	29.55	62	63.00	6	4.90	70	28.0	215	20.87	
Rs. 30 and below Rs. 40	—	1.8	9	9.00	16	13.2	31	12.0	73	7.1	
Rs. 40 and below Rs. 50	—	0.45	—	—	4	3.30	16	6.0	29	2.8	
Rs. 50 and below Rs. 60	—	1.00	4	4.00	6	4.9	12	4.7	—	—	
Rs. 60 and below Rs. 70	—	—	—	—	—	—	—	—	—	—	
Rs. 70 and over	—	—	—	—	—	—	—	—	—	—	
Total	100.0	99	100.0	—	—	—	—	100.0	254	100.0	1,030

THE STANDARD OF LIVING

247

TABLE LXXVIII.—*Analysis of Some Family Budgets of Industrial Workers in India*

Locality and Industry	No. of budgets	Average income	Percentage of expenditure on main consumption groups				Miscellaneous expenditure	Average monthly expenditure
			Food	Clothing	Rent	Fuel, Household Requisites		
Assam Plantation		Rs. As. Ps.					Rs. as. ps.	
Jorhat (S. N. Mukerji) ..	—	21 12 0	76.2	4.1	—	2.5	—	17.2 24 4 0
Bihar coal-fields ..	1,030	17 11 2	72.1	7.6	—	1.1	0.8	18.4 17 10 5
Dehri-on-Sone ..	254	22 1 0	53.8	6.3	3.33	5.43	1.14	30.0 20 6 3
Jamalpur and Monghyr ..	220	27 9 0	57.1	7.92	2.50	6.11	2.67	23.70 30 12 3
Madras textile ..	125	34 7 0	64.9	7.5	4.74	7.13	1.72	14.01 34 7 0
Madras, workers in organised and unorganised industries ..	—	37 5 11	52.63	4.5	11.14	6.67	—	25.06 37 0 2
Coimbatore, textile ..	96	28 3 2	57.7	6.21	5.05	6.81	0.44	23.79 33 0 3
Jubbulpore, potteries and textile and others ..	67	23 0 0	66.71	9.00	1.15	4.59	2.24	16.31 22 12 0
Nagpur, textile and others ..	102	29 8 0	58.13	8.32	2.15	7.99	1.56	21.85 30 8 0
Lucknow, E.I. Railway workshops ..	137	23 10 0	52.04	8.16	6.73	7.33	1.46	24.23 23 8 3
Cawnpore, textile engineering, and leather works ..	729	25 8 6	48.12	7.44	8.76	6.02	1.75	27.91 24 14 10
Calcutta, textile ..	85	55 0 9	57.11	8.33	10.58	7.12	3.14	14.72 51 9 4
Jamshedpur ..	637	38 6 9	56.53	10.5	4.23	6.64	1.1	21.0 31 3 10
Sholapur, textile ..	902	39 14 10	52.76	12.70	6.72	10.28	1.08	16.46 37 13 11
Ahmedabad, textile manual ..	872	44 7 2	57.90	9.45	11.74	7.04	1.16	12.71 39 5 8
Bombay, all industries ..	2,473	52 4 6	52.32	8.40	7.67	7.29	2.26	22.06 47 14 5

light on the overplus of unskilled workers and their irregularity of employment in this city.

Comparison of Budgetary Position of Indian and Foreign Workers

We may now compare further the standards of living of industrial workers in different industrial centres of India by bringing together the data on average monthly wages and the percentage expenditure for the principal items in the working class family budgets. This is done in Table LXXVIII.

This detailed analysis of the percentage of expenditure on the various consumption groups among the workers in different industrial centres in India may be compared with that in the working class family budgets in some foreign countries.

TABLE LXXIX
*Analysis of Some Family Budgets of Industrial Workers
in Other Countries*

Locality and Industry	Annual income	Food	Clothing	Rent	Heating	Misc.
China						
Peiping ..	\$210	58.2	4.6	9.4	11.8	16.0
Shanghai ..	—	55.8	7.4	8.5	6.5	21.8
Japan						
Primary Poverty ..	y200	65.0	6.0	12.0	—	17.0
Land Workers ..	Average	41.2	7.9	15.2	6.0	29.7
Industrial Workers	Average	38.5	11.3	13.6	4.9	31.7
U.S.A.						
Farm Families ..	\$1,983	39.5	13.8	11.6	7.2	27.9
Lowest bare existence	\$744	48.2	18.2	19.3	6.7	7.6
Great Britain						
Agricultural household	Wages not exceeding £250 a year	{ 48.4 40.1	{ 9.1 9.5	{ 8.3 12.7	{ 8.6 7.6	{ 25.6 30.1
Industrial household						
Germany	—	46.6	13.5	10.6	3.8	—
Belgium	—	59.6	15.8	6.4	5.0	—
Netherlands	—	40.1	9.0	15.8	5.7	—

Table LXXIX shows that the percentage of expenditure on such necessities as food and clothing to the total family expenditure is far higher in India than in most industrial countries

in the world, including Japan, though wide variations of the percentage are discernible among the different Provinces of India. According to the well-known law of Engel this is indicative of the lowest plane of living of the Indian industrial working class associated with the greatest urgency of food requirements as compared with other needs of the family. The higher budgetary position of Japan, than is expected, is explained in some measure by the national habit of limiting food expenditure to the simplest and cheapest food, principally rice, and thus leaving the budget, even though on a low scale, relatively free for other types of expenditure. As between the different industrial centres in India, Bombay shows the lowest percentage of expenditure on food and clothing (60.72), thus showing the superior economic position of the workers here as compared with Nagpur, Jamshedpur, Madras and Calcutta. The percentages of expenditure on food and clothing of the working class families in these towns are 66.45, 67.03, 72.4 and 74.4 respectively. In the plantations and coal-fields, however, the living standard is far lower, as shown by the overwhelming percentages of expenditure on necessities, 80.3 and 79.7 respectively.

Analysis of the Indian Workers' Expenditure on Food

The above table clearly shows that the expenditure on foodstuffs constitutes more than half the total expenditure in the working class family budgets. Even with this considerable relative expenditure on food the workmen's dietary is sometimes inadequate in its calorific value and is usually ill-balanced. The bulk of calories in the working class diet is derived from cereals and pulses. On an average 10 per cent of the total calories needed are obtained from protein; among the industrial workers in India as compared with 10 to 19 per cent in Swedish and French diets, and about 75 per cent on an average from carbohydrates as compared with 50 per cent of the energy content in Western diets.

The next table shows the proportions of food materials and calories in various working class diets in India, and the figures make it clear that most workers' diets in India do not reach the average standard requirement of 3,000 calories per

TABLE LXXX

*Distribution of Quantities of Food Materials and Calories
in Working Class Diets in India*

	Proteins in grammes	Fats in grammes	Carbo- Hydrates in grammes	Total calories
Proposed Indian standard requirements	85	60	605	3,000
Indian Army—peace scale (wheat-eaters)	93.7	56.2	625.8	3,470
Indian Army—peace scale (rice-eaters)	58.5	50.1	654.3	3,386
U.P. Textile worker (Mukerjee)	90	45	530	2,800
A colliery hookman (Bansi) ..	76.4	7.3	725.5	3,025
A miner in Bihar Coal-fields (Seth)	75.88	22	551.75	2,694
Bombay woman mill worker (S. K. Talpade)	57	38.0	413	2,234
Bengali Jute Mill Worker (A. C. Roy Chowdhury) ..	66	41	526	2,752
Bengal Jail diet	93.31	30.49	693.33	3,508
Hindustani Cotton-mill worker in Bengal (A. C. Roy Chowdhury)	68	45	401	2,340
Madras Coolie (McCarrison) ..	68.7	7.2	789.2	3,226
Chinese Factory hand (Ting-an-Li)	92.1	35.2	551	2,899
Japanese worker (Inata) ..	95	16	600	3,000
German worker	101.2	—	—	3,035
Dutch worker	125.6	122.8	465	3,479
Czecho-Slovak worker	118.3	91.8	471.6	3,033
American (Pearl)	95	113	447	3,185
Royal Society Food (War) Committee, Great Britain ..	100	100	500	3,390

day. An investigation of family budgets of organized and unorganized industrial workers in Madras has shown that except for families in the highest income group, viz. those whose income exceeds Rs. 70 per month, not one of the other groups of families is able to attain the standard of 2,800 calories. In this group where the monthly food budget amounts to Rs. 39.11.4 the minimum dietetic standard is exceeded by only 2 per cent families. In the average of all families, with whom

the monthly food budget represents only Rs. 19-7-8, the calorie content of the prevailing diet is 14 per cent below the standard (2,800 calories). According to Aykroyd the cost of this minimum ration is about Rs. 6 per month but the amount spent on food per unit of consumption ranges from Rs. 3-5 in the income group below Rs. 20 to Rs. 5-3 in the income group over Rs. 70. Thus there does not seem to be any prospect of the working class families of Madras being able to afford the minimum ration.

Diet and Industrial Efficiency

In different parts of India climate and agriculture determine the dietary of the people. Climate, race, dietary, and efficiency are reciprocally interdependent in this country. On the whole the wheat-and-legume-eaters of Northern India who also consume milk and milk products in greater abundance show greater body weight, stamina and efficiency than the rice-and-legume-eaters of Eastern and Southern India. Rice is a cheaper cereal than wheat, and though rice-eating industrial workers of India exhibit an excess of starch, poverty of protein and deficiency in vitamin A and vitamin B in their diets, they can buy the food more cheaply. The rice-eating peoples of India, with their inferiority in stature, weight and stamina may not have been mis-fits in agriculture in the damp, moist climate of Bihar, Bengal, Orissa and Madras, but so far as strenuous toil in the factories and mines is concerned their inferior physique is a positive handicap. In the engineering industry in Bihar a khalasi who belongs to Bihar and Bengal begins on 8 as. per diem, but if he comes from the 'up-country', he often gets double that wage. Obviously the khalasi's work requires both strength and endurance. This differentiation of the wage level is not found, however, among Bengali, Bihari, Madras, C.P., and U.P. textile operatives who compete with one another in the jute mills on the Hooghly. In the Bihar coal-fields the Bilaspuri's or the C.P. miner's earnings and wages are about one and a half times those of the local and aboriginal coal-cutters and loaders such as the Bhuiyas, Kols, Oraons and others. While the C.P. miner and his wife would be earning Rs. 15 to Rs. 20 per mensem, the local miner and his

wife earn Rs. 12. For both men and women, the C.P. miners generally show better physique and stamina than the Bhuiyas, Dosadhs and Kahars of Bihar. Differences in climate, diet and race and their effects upon the efficiency of industrial workers in India have not been adequately investigated.

A stripper and a reeler in a South Indian cotton mill can live on Rs. 6-9 to Rs. 7 a month but not the textile workers in Delhi or Lyallpur. The problem arises whether the Bengali, the Bihari, or the Madras can stand the continuous, strenuous toil in the factories and mines with his inferior physique, lower nitrogenous exchange and poorer dietary. His average weight which is about 116 lbs. as compared with the Bilaspuri's and Punjabi's weight of 150 lbs. is an obvious industrial handicap.

Effects of Dietetic Differences in the Same Industrial Area

The following contrast of the calorific values of food of immigrant C.P., Bihar, and Madras workers in the jute mill centres of Bengal is striking:

TABLE LXXXI

Monthly Distribution of Cereals and Calories in Staple Foods of Workers from the C.P., Madras, and Bihar

Worker	Rice		Wheat		Pulses		Total calo- ries for all articles of diet
	Qnty.	Cals.	Qnty.	Cals.	Qnty.	Cals.	
C.P.	12.7 Ch.	2,667	2.3 Ch.	455	2.6 Ch.	510	3,928
Madras	10.3 "	2,163	0.22 "	44	1.2 "	235	2,737
Bihar	5.1 "	1,071	3.7 ..	733	1.5 ..	294	2,450

Ch. = Chhataks

The C.P. worker consumes more vegetable protein than any other worker in the jute mills, and his diet yields a much larger amount of calories on an average. In Japan higher industrial efficiency has been reached through systematic improvement of protein in the working class diets.

The jute mill area is a meeting-ground of different peoples and foods of India. In this respect, however, Jamshedpur may be considered as an epitome of India where workers from all parts of the country have come together. An enquiry in this industrial town into the foods consumed by working class families from different Provinces given in TABLE LXXXII yields

TABLE LXXXII
*Per Capita Consumption (in seers per month¹) of Different Articles
 of Food by Workers from Different Provinces¹*

	Cereal	Pulses	Cheese	Fish	Meat and Milk	Percentage expenditure on Milk	Percentage expenditure on Meat and Milk			
Pathan worker from the N.W.F.P.	21.69	29.13	1.45	2.41	.82	15.32	2.86	10.87	4.25	10.70
Punjabi worker	19.94	32.17	2.43	5.19	1.04	20.18	.96	7.34	4.76	13.38
U.P. worker	16.71	34.18	2.64	7.21	.48	12.45	.58	5.55	3.30	12.67
C.P. worker	19.71	41.06	2.61	8.03	.19	5.94	.58	6.63	1.66	7.88
Madras worker	14.46	36.64	1.26	4.80	.13	4.96	.80	10.23 ¹¹	1.60	8.79
Aboriginal and Hinduised worker from Bihar	17.63	39.98	2.37	7.92	.19	6.57	.61	7.66	1.58	8.05
Aboriginal worker from the surrounding na- tive States	18.61	44.72	1.98	7.13	.14	5.26	.52	6.90	1.39	7.36

1. Report of the Bihar Labour Enquiry Committee, Vol. II, Parts A & B, pp. 80-82 and 96-97.

certain interesting conclusions:

It is clear from these figures that the Pathan and Punjabi workers who form important elements in the labour population, though they are numerically inconsiderable, owe their position to the kind of labour they perform and the latter is directly connected with their superior diet, strength and stamina. The Punjabis represent about 8 per cent and the Frontier people from Peshawar and Mardan only 1 per cent of the total labour force in Jamshedpur. On the opposite pole are aborigines and semi-Hinduised aborigines and other castes from Bihar whose diet and physique are the most unsatisfactory. It is no wonder that a little less than half the total number of local workers (47.5 per cent) belong to the unskilled category represented by coolies, rejas and khalasis.

Diet and Income

If we compare the workers from the different Provinces according to income-groups we shall also find that the gradation according to dietary and physical efficiency closely corresponds to the gradation of incomes, workers belonging to the highest income-groups coming from the N.W.F.P., the Punjab and U.P.; while Bihar and the Indian States round about Jamshedpur show the smallest average incomes.

TABLE LXXXIII

Number of Working Class Families from the Different Provinces in Various Income-groups at Jamshedpur¹

Province or State	Less than Rs. 10						Rs. 40-50	Rs. 50 and over	Average income		
	Rs. 10-15	Rs. 15-20	Rs. 20-30	Rs. 30-40	Rs. 40-50	Total			Rs.	As.	Ps.
N. W. F. Province	—	—	1	5	3	1	10	38	6	4	
Punjab	....	1	5	15	26	9	79	36	11	5
U.P.	—	6	6	14	27	24	20	97	37	6	
C.P.	1	19	25	48	25	22	9	149	28	2	
Madras	—	7	7	28	23	19	14	98	34	1	
Bihar	18	34	47	50	64	48	19	280	27	3	
Bihar States	5	8	10	16	5	1	2	47	23	1	
										7	

1. Report of the Bihar Labour Enquiry Committee, Vol. II, Parts A & B, p. 64.

The Punjabi is no doubt the strongest and hardest among the industrial workers of India. At Jamshedpur he undertakes hot jobs in the engineering industries and is considered to be the best fed among the working population in that centre. His milk and ghee consumption is the largest among the workers there, amounting to one seer of ghee and 4.76 seers of milk per consumer per month. The Punjabi worker at Jamshedpur, with a high average income of Rs. 36-11-5, may be regarded as having reached the highest dietary standard in India, but the deficiency of his diet is striking as compared with the diet of industrial workers in the West.

Lower Nutrition Level of Indian Workers

TABLE LXXXIV
*Average Monthly Food Consumption (in kilograms)
 per Adult Worker¹*
 (Results of Recent Family Budget Enquiries)

Bihar coal-field	Deuri-on- Sone	Jamalpur	Jamshedpur	Jamshedpur Punjabi worker	Italy	Belgium	Germany	Great Britain	U.S.A.
Cereal &									
Bread	23.5	24.16	23.7	14.3	20.7	20.0	16.7	11.0	8.1 11.4
Meat &									
Fish	0.67	0.45	0.18	0.76	0.09	2.0	2.15	4.7	5.8 4.8
Fats	0.37	0.65	0.70	0.76	1.13	1.2	2.38	1.4	0.8 0.946
Milk	0.54	1.62	1.55	1.99	4.28	3.4	12.09	14.0	10.5 15.08
Sugar	0.33	0.15	0.3	0.8	1.54	0.4	1.25	1.5	3.3 2.4

The deficiency in the Indian workers' diets is clearly discernible from the excessive consumption of cereals on the one hand, and the inadequacy of meat, fish and milk on the other. Even the Punjabi worker's diet at Jamshedpur which represents the highest physiological level of nutrition reached in India falls far short of the standards reached in the dietaries of the Western workers.

1. Compiled from the family budget enquiries undertaken at the instance of the Bihar Labour Enquiry Committee. See Report, Vol. II; and the tables given in "Worker's Nutrition and Social Policy", Appendix IV, International Statistics of Food Consumption.

Relation between the Improvement of Income and of Nutrition

At the Jamshedpur industrial centre the diet of the aboriginal workers and of workers from Bihar and the C.P. is the worst. But the adequacy or inadequacy of diet largely depends upon income. K. Mitra, Nutrition Officer in the Province of Bihar, has correlated the amount of each kind of food consumed with the income level by investigating the food consumption of 177 families in Jamshedpur. With an improve-

TABLE LXXXV

Improvement of Nutrition with the Rise of Income of Industrial Workers at Jamshedpur, 1939

	Group I Monthly income up to Rs. 30	Group II Monthly income Rs. 30-40	Group III Monthly income Rs. 45-90	Group IV Monthly income Rs. 90 and above
No. of families ..	110	35	19	13
Per cent in each group ..	62.2	19.8	10.7	7.3
No. of consumption units per family ..	3.35	3.93	4.46	4.82
Monthly income per consumption unit ..	Rs. 6.2	Rs. 9.12	Rs. 15.0	Rs. 25.15
Monthly expenditure on food per consumption unit ..	Rs. 3.12	Rs. 5.9	Rs. 7.10	Rs. 10.1
Daily intake (ozs.) ..				
Cereals ..	23.9	24.4	27.1	21.0
Pulses ..	2.4	3.1	3.8	3.4
Non-leafy vegetables	2.3	2.7	5.5	6.2
Green leafy ..	1.2	1.0	0.3	0.1
Fruits and nuts ..	0.1	0.3	0.9	0.9
Oil and fats ..	0.5	0.8	1.3	1.8
Milk ..	0.5	1.4	2.6	5.7
Meat, fish and eggs ..	0.6	0.7	1.3	1.0
Condiments ..	0.7	1.0	1.6	1.6
Sugar and jaggery ..	0.2	0.3	0.7	0.8
Calories ..	2,940	3,190	3,250	3,330
Percentage from cereals ..	83.9	74.9	68.0	61.8
Protein ..	68	78	85	85
Fat ..	21	35	45	68
Calcium ..	0.41	0.51	0.55	0.92

ment of income, food consumption has been found to change in the right direction, and the diet becomes richer in calories, fats and proteins although the higher income groups tend to disregard green leafy vegetables which are a rich source of certain vitamins, minerals, and salts. Nothing indicates more clearly than TABLE LXXXV that an increase of income of industrial workers tends to improve standards of nutrition and with this their health and efficiency.

It is evident that 62.2 per cent of the families are getting less than 3,000 calories—which figure, and not 2,600 calories, should represent the absolute minimum for industrial workers in India. Aykroyd, as we have seen, reckons the minimum calorie need of an average Indian, engaged in ordinary agricultural and coolie work as 2,500 to 2,600 calories per diem. But he admits that those who perform heavy manual work probably require about 2,800 to 3,000 calories per day, as is indicated by the League Commission's figures.¹

One method of obtaining higher industrial efficiency is the enrichment of the workers' dietary with vegetable and animal proteins, derived from pulses, milk and milk products, and from meat and fish. Various religious scruples and social prejudices have to be overcome to achieve this object, while the income of industrial workers must rise in order that a richer and a more balanced dietary can be secured. No doubt, without a programme of dietetic reform and improvement, whatever might have been the reciprocal adjustments of climate, race, and diet in agricultural labour, any high standard of industrial efficiency cannot be expected.

The Standard of Clothing

In respect of the expenditure on clothing of an Indian working class family, it is obvious that scant clothing for many types of industrial workers, as for instance plantation labourers and miners, does not make them inefficient in the Indian climate. On the other hand, when they cannot wear shoes at all they make themselves susceptible to both hookworm infections and foot sores. In the lower income-groups, we find that

1. The Nutritive Value of Indian Foods and Planning of Satisfactory Diets.

the percentage of expenditure on clothing and foot-wear and on household requisites is higher than in the upper income groups. This is because a minimum standard of decency is to be maintained as regards apparel, while certain ordinary earthen-ware utensils and quilts made of torn clothes stitched are also indispensable. In the upper income-classes the percentage of expenditure on these necessary and conventional items remains about the same. Tables LXXXVI and LXXXVII illustrate this.

Expenditure on Health, Education, and Recreation

Miscellaneous expenditure in the Indian family budgets follows Engel's law closely. It shows a higher proportion to the total family expenditure as the average income rises. That portion of the miscellaneous expenditure is most significant as an index of a higher living standard which represents expenses on medicine and medical assistance, on schooling and on recreations. It is a striking evidence of progress in standard of living in the country that even the aboriginal miners have begun to spend something on medical aid, education and recreation. On the other hand religious ceremonies, although justifiable in some measure from the point of view of the relief they afford from the dull monotony of unremitting drudgery, take away an abnormal proportion of the worker's income. Enquiry has revealed that among the group of unskilled workers, chiefly aborigines, the average expenditure per family under this head is 8 as. per month in Jamshedpur, the percentage expenditure being the highest on this item in this group. On the whole, the working class should be regarded as extravagant in respect of expenditure on religious observances, feasts and festivals in spite of the sociality and cheer associated with them. Likewise extravagant and injurious is the expenditure on drink and other indulgences.

In the Assam tea plantations the average expenditure on liquor amounts to 12.8 per cent of the total income. In the jute mills of Bengal it amounts to 11.6 per cent of the income. In Bombay the Labour Office enquiry shows that among very low class families such as scavengers the average expenditure on liquor comes to 8 to 10 per cent of the total income. The

Percentage Expenditure of Families by Income-classes on Clothing and Household Requisites

Income-Classes	Ahmedabad	Jamshedpur	Cawnpore	Dehri-on-Sone	Jamalpur	Gondia Coal-fields
TABLE LXXXVI— <i>Clothing.</i>						
Below Rs. 20	..	11.97	8.07 (Below Rs. 15)	8.86	11.22	13.55
Rs. 20 to 30	..	9.00	11.36 (Rs. 15 & below 30)	7.72	8.24	13.9
Rs. 30 to 40	..	9.19	13.26 (Rs. 50 & over)	7.20	7.15 (Rs. 50 & over)	12.1 9.22
Rs. 40 to 50	..	9.62	12.72 12.44	7.07 —	9.61 5.59	— 4.23
Rs. 50 to 60	..	9.37	—	—	—	—
Rs. 60 to 70	..	9.63	—	—	—	—
Rs. 70 to 80	..	9.60	—	—	—	—
Rs. 80 to 90	..	10.15	—	—	—	—
TABLE LXXXVII— <i>Household Requisites</i>						
Below Rs. 20	1.05	.95	—	.41	1.07	3.44
Rs. 20 to 30	..	1.16	.74 (Rs. 15 & below Rs. 30)	.67 .82	1.82 1.6	—
Rs. 30 to 40	..	1.24	1.34 (Rs. 50 & over)	1.84 1.73	.89 1.00	1.9 3.4
Rs. 40 to 50	..	1.17	1.42 (Rs. 50 & over)	1.49 1.49	— 1.3	— 4.5
Rs. 50 to 60	..	1.16	1.57 —	— —	— —	— —
Rs. 60 to 70	..	1.10	—	—	—	—
Rs. 70 to 80	..	1.12	—	—	—	—
Rs. 80 to 90	..	1.10	—	—	—	—

TABLE LXXXVIII
Average Monthly Expenditure on Health, Education and Recreation.

	Health			Education			Recreation (including religious observances and festivals)			Total			Percentage of total expenditure
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	
Jamshedpur	0	7	8	0	5	7	0	14	6	1	11	9	5.5
Jamalpur and Monghyr	1	3	6	1	1	0	1	2	6	3	7	0	11.17
Dehri-on-Sone	0	1	10	0	1	1	0	6	1	0	9	0	2.7
Bihar Coal-Fields	0	0	4	0	0	10	0	5	5	0	6	7	3.6
Cawnpore	0	0	7	0	1	1	0	4	5	0	6	1	1.5

TABLE LXXXIX
Average Monthly Expenditure on Drink and Other Indulgences

	Drink and drug			Tobacco and pan			Total indulgences			Percentage of total expenditure
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	
Jamshedpur	0	7	6	1	1	6	1	9	0	5.0
Bihar Coal-Fields	0	10	3	0	7	2	1	1	5	3.6
Jamalpur & Monghyr	0	4	6	0	12	0	1	0	6	1.5

proportion of all industrial workers' families using liquor is found to be 72 per cent in Bombay, 43 per cent in Sholapur and 26 per cent in Ahmedabad, the percentage of expenditure being respectively 4.1, 2.27, and 1.39. It is found that the average expenditure on liquor for all single person's budgets is 10 per cent as compared with 4.1 per cent in the case of family budgets. The drink evil was appalling in the Bihar coal-fields after the introduction of the out-still action system in 1932 when it was estimated that 90 per cent of the male workers used to drink, spending about 50 per cent of their income on liquor. Even women took to drink more than

before. Coal raisings were also appreciably reduced. Fortunately on the 1st of April 1939, the Bihar Government introduced prohibition in Jharia and some areas in the districts of Hazaribagh and Ranchi. It is necessary, however, that in these areas systematic endeavours should be made to introduce tea, coffee and cocoa shops and milk bars. Without substitutes for alcohol, illicit distillation in the rural areas is expected to increase. In Assam it is estimated that about two-thirds of the total consumption of country spirit in the Province is accounted for by workers employed in tea plantations and other industries. All industrial areas are increasing their consumption of liquor, though it is difficult to prove this from family budgets. The following figures would show the consumption of liquor in the chief industrial centres of Bihar.

TABLE XC

*Consumption of Liquor in the Provincial Industrial Centres
in Bihar, 1937-1939*

	1937-38	1938-39
Jharia coal-fields	485,298 bulk gallons (out-still) 2817.5 mds. (pachwai or rice beer)	490,922 bulk gallons (out-still) 3008.1 mds. (pachwai or rice beer)
Jamshedpur Centre	58343.6 L.P. gallons (country spirit)	7075.6 L.P. gallons (country spirit)
Jamalpur Centre	7233.6 L.P. gallons (country spirit)	7387.2 L.P. gallons (country spirit)
Dehri-on-Sone	7332.8 L.P. gallons (country spirit)	8483.9 L.P. gallons (country spirit)

Expenditure on health, education, and amusement has been calculated for a certain number of workers' family budgets in India. By way of contrast the expenditure on these purposes of the mill-hands in Bombay and of the miners in Bihar is compared in Table XCI.

It will be found that the proportion of families incurring expenditure on education is considerable in Bombay city (21 per cent) as compared with only 7.3 per cent for the miners. But even this small proportion is a satisfactory index of im-

TABLE XCII
*Percentage Distribution of Families spending on Health,
 Education, and Amusement*

	Health	Average expenditure			Education	Average expenditure			Amusement	Average expenditure		
		Per-	Per-	Per-		percentage	Rs. as. ps.	percentage		percentage	Rs. as. ps.	
Bombay	11.3	1	2	9	21.0	0	13	0	19.0	1	3	7
Bihar												
coalfields	9.5	0	3	4	7.3	0	11	1	16.9	0	0	10

provement of the standard of living in the coal-fields. For in the Dehri-on-Sone centre only 6 per cent of the families are found spending anything on education. Their expenditure comes to Re. 1-2-5 per family. At Jamshedpur the number of families incurring expenditure on schooling is 18 per cent and the average cost is Re. 1-15 per family. In Lucknow and Cawnpore a literacy survey conducted by the Department of Economics and Sociology, Lucknow University, has shown that only 18.9 per cent of the industrial workers spend something on the schooling of the children. These are all found to be above the income-groups of more than Rs. 30 a month.

The proportion of families which spend on amusements will naturally be larger in a city where opportunities of recreations are much greater to beguile the workers' leisure. Especially in the coal-fields and plantations such opportunities are rare. But we have found workers coming on cycles or by trains to see a film, a football match, or a wrestling contest, or, again, to visit a brothel in the nearest town or city. Jute-mill workers from the mill-towns on the Hooghly visit cinema houses, liquor shops and brothels in Calcutta regularly.

TABLE XCII indicates that working class families which fall into the higher income-groups have a larger monthly expenditure on health, education and amusement.

Many industrial workers show no expenditure on either education or amusement. Social ceremonies and festivals, of course, are responsible for much unwise and extravagant expenditure; while the consumption of liquor which

TABLE XCII

*Average Monthly Expenditure on Health, Education and Recreation,
according to Income-Groups, Jamshedpur*

Income-grades	Health	Education	Recreation	Total
	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
Less than Rs. 10	0 1 6	—	0 2 0	0 3 5
Rs. 10 to 15	0 3 0	0 0 9	0 0 9	0 4 6
Rs. 15 to 20	0 4 5	0 1 5	0 1 0	0 6 10
Rs. 20 to 30	0 5 11	0 3 4	0 1 3	0 10 6
Rs. 30 to 40	0 8 0	0 4 11	0 2 0	0 14 11
Rs. 40 to 50	0 10 10	0 9 6	0 2 10	1 3 7
Rs. 50 and over	0 15 0	0 15 9	0 3 9	2 1 6
Average	0 6 11½	0 5 1	0 1 11	0 13 10

has become a common habit accounts for much misery and indebtedness. Even with an increase of earnings, the standard of living of industrial workers cannot be changed in a day. Hence it is necessary to regulate extravagance and intemperance both by administrative measures and by education and propaganda. Economic surveys have already indicated that with the adoption of prohibition in certain industrial centres the consumption of more adequate and nutritive food has increased among the industrial workers; and there is less of borrowings. Where prohibition may not be adopted, it will be of great advantage to the industrial working class to close liquor shops on holidays and pay days, to restrict the hours of sale of liquor on week days, or to prohibit the sale of liquors above a certain strength (as for instance, above 50° U.P. which cannot be used in the Province of Bihar). Similarly it is necessary to regulate prostitution by segregation or at least by the removal of brothels from near working men's quarters and factory sites; while brothels, liquor shops and cinema houses must not be located near one another.

The Need of Wholesome Recreations

The transformation of social customs and habits of expenditure is a tardy process. Where drink causes widespread

havoc among the industrial workers, it is the duty not only of the State to intervene with a programme of prohibition or drastic restriction, but also of the employers and welfare agencies to organize recreational interests and activities. Many employers provide suitable play-grounds and facilities for Indian games and gymnasium. Radio sets have been installed by the Tata Iron and Steel Co., at their collieries. Facilities have also been provided by the same Company for various English games as well as for the Indian game of kabadi. Dramatic performances are also held periodically in several collieries and workers are admitted free to such performances. In several plantations sports, bhajan parties, and dramatics have been organized, while some progressive employers have installed cinemas, or hire touring cinemas for out-of-the-way gardens which arouse great excitement among the coolies. It pays the coolie who takes his wife to the pictures on leave day, keeping away from drink. The British India Corporation at Cawnpore provide facilities in their settlements for football, hockey and wrestling. The Elgin Mills maintain a gymnasium and have appointed a wrestling instructor. Other forms of recreation provided for the workers are musical sortie, recital of famous tales of Indian chivalry (Alah), excursion and picnic. Several social welfare agencies like the Social Service League in Bombay and Calcutta and the Y.M.C.A., have been carrying out notable activities through trained and salaried staffs. The Ahmedabad Textile Labour Association has also taken a keen interest in providing facilities for physical culture and for various wholesome recreations of the workers. Wherever recreational activities have been systematically organized, the workers have responded, and in some industrial centres even working class women have been seen to take part in out-door sports; while workers have formed dramatic clubs, and given periodical performances that have delighted outsiders. All this is calculated to check the drink habit and the addiction to drugs, to strengthen ambition and desire for self-improvement, and to improve the social outlook of the workers generally which enable them to extract happiness from their present privations and sufferings.

Control and Reduction of Indebtedness

Both the protection of the State and substitution of wholesome for unwholesome recreations through organization, education and propaganda are equally indispensable to check the expenditure on drink and drugs which reduces the standard of living of industrial workers. A similar protection by legislative measures and by propaganda for the restriction of expenditure on social ceremonies is necessary to curtail the expenditure involved in the liquidation of and payment of interest on debt by industrial workers. It is true that much indebtedness originates from the workers' difficulty or impossibility of maintaining normally a balance between earnings and expenditure at the present level of prices. But a considerable proportion of working class indebtedness is due to injudicious expenditure on social ceremonies and festivals. It has been found that among the industrial workers in Bombay the average expenditure in each marriage is Rs. 214 which is more than the annual income in 4 per cent of the families; and more than half the annual income in 23 per cent of the families. The proportion of the workers' indebtedness for marriage is 46 per cent in Madras and 36 per cent in Cawnpore. For all kinds of social and religious ceremonies the proportion of indebtedness in Jamshedpur is 31.8 per cent, and 38.2 per cent in the Bihar coal-fields. Legislation to eliminate expenditure on births, marriages, deaths and other events in life is necessary to prevent the worker's indebtedness from being a drag on his efficiency, especially as he has to face unemployment due to strike or retrenchment and consequently to run into debt for maintaining his family if he has no land to fall back upon. Unemployment was responsible for over 48 per cent of indebtedness among Bombay textile workers in 1930. The causes of the industrial worker's indebtedness are much more varied than those of the agricultural worker's indebtedness, which in fact has driven the worker to industry. Income groups from the highest to the lowest are not free from debt. The workers in the lowest income grades naturally bear the heaviest burden, but due to injudicious consumption and imprudence, the higher income grades also show a considerable proportion of indebted

families. At Jamshedpur as we rise from the lower to the higher income grades more and more families are found indebted. This suggests, in the first place, that lower income grades having inadequate security cannot borrow extensively. Secondly, want of thrift characterizes the higher income classes.

*Indebtedness of Industrial Workers, Bihar Coal-fields
and Jamshedpur¹*

TABLE XCIII A—*Bihar Coal-fields*

Income-groups	Percentage of families in debt	Average indebtedness per family (in debt)	Multiple that debt forms of monthly income
Rs. As. Ps.			
Below Rs. 5	38	16 0 9	3.9
Rs. 5 to 10	50	19 13 3	2.4
Rs. 10 to 15	50	34 4 3	2.8
Rs. 15 to 20	47	28 2 7	1.7
Rs. 20 to 30	33	37 11 5	1.5
Rs. 30 to 40	37	43 8 4	1.3
Rs. 40 to 50	31	155 12 4	3.5
Rs. 50 and over	—	—	—

TABLE XCIII-B—*Jamshedpur*

Income-groups	Percentage of families in debt	Average indebtedness per family (in debt)	Multiple that debt forms of monthly income
Rs. As. Ps.			
Below Rs. 5	—	—	—
Rs. 5 to 10	35.7	73 12 10	5.53
Rs. 10 to 15	63.9	53 14 5	2.74
Rs. 15 to 20	61.3	71 1 7	2.53
Rs. 20 to 30	77.1	105 12 10	3.39
Rs. 30 to 40	76.3	187 6 5	4.25
Rs. 40 to 50	82.9	261 9 7	4.89
Rs. 50 and over	79.6	268 8 0	3.90

1. Compiled from the Report of the Bihar Labour Enquiry Committee, Vol. II, Parts A and B.

Table XCIII indicates the amount of indebtedness and the proportion of families in debt in the various income groups:

The abnormally high cost of living at Jamshedpur accounts for a proportionately higher debt burden per family, especially in the lowest income-grades than in the coal-fields. As a matter of fact the lowest two income-grades in Jamshedpur are overwhelmed with debt. In the upper income-grades while the percentage of indebted families diminishes in the coal-fields, it rises in Jamshedpur, due perhaps to both high cost of living and lack of thrift.

Co-operative credit societies, thrift societies and better living societies are all necessary to be introduced on a much larger scale in the industrial centres to promote prudence, to control over-borrowing, and to offer cheap facilities of credit. Industrial establishments in different parts of India have here and there started co-operative societies and workers' banks to afford facilities of cheap credit to the working class. The Bird and Heilgers group of jute mills in Bengal run workers' banks which advance loans to workers at 12½ per cent rate of interest up to a maximum of the equivalent of two months' wages. Many mills also run their own shops providing the necessaries of life to the workers at cheap rates but many workers cannot avail themselves of this facility since they cannot obtain release from the local shop-keepers from whom they obtain essentials on a credit basis. Much of the debt of industrial workers is owed to shop-keepers who supply food-stuffs and other necessities on credit. In the Bihar coal-fields the shop-keepers account for 26.7 per cent of the credit and their usual rate of interest is 37.5 per cent. They also charge exorbitant prices, especially in out-of-the-way places, and take full advantage of the illiteracy of their clients for both underweightment and accumulation of fraudulent debit. Many employers have established co-operative stores from which the workers can purchase their necessities more cheaply. But the working class generally prefer shops which are not strict in demanding prompt payment. It is thus that private shop-keepers compete very successfully with co-operative stores, whose facilities are generally availed of by employees belonging to the upper income-grades. Another

ubiquitous and more exacting creditor is the Pathan or Kabuli, who catches hold of his clients very near the factory gates and pay offices of plantations and collieries, and has no scruples in freely using his lathi. In the Bihar coal-fields he is responsible for 12.8 per cent of the credit; and the rates of interest he usually charges vary between 150 to 300 per cent. The harsh methods used by this class of money-lenders are too well known in the plantations and in mining and industrial areas. But the State has not offered adequate protection to the indebted workers in all Provinces. The enactment of an Act like the C.P. Protection of Debtors Act, 1937, is over-due in all Provinces. Its main features are that molestation of a debtor by a creditor is made a cognizable offence punishable with imprisonment up to three months or fine up to Rs. 500, and molestation is so defined as to include the use of violence, intimidation, persistent following about and loitering near a debtor's residence or his place of work. Debt Redemption and Conciliation Acts have been passed in most Provinces of India; but the benefits of such legislation are now confined to the agriculturists. Governments in all Provinces should immediately consider the applicability of their Provincial Debt Relief Acts to the industrial workers. If irrecoverable debts be written off or scaled down with reference to the movement of prices and the paying capacity of the debtor worker, he will be relieved of that tyranny of debt which now hampers his efficiency by swallowing up the remuneration he gains by any extra effort. State intervention for the control and reduction of the workers' debt would improve his standard of living and efficiency, when the worker can reap in full the reward of the labour which now enriches the money-lender. With this will also come ambition and initiative, and the full benefit will accrue of educational and recreational activities offered to the worker. So far as the lower grades of industrial workers are concerned the guarantee of minimum wages and sickness and unemployment insurance will also go a long way in raising the worker's scale of living and level of efficiency—which will react favourably upon each other, and thus a progressive improvement of both can be maintained. It is only then that the Indian worker will realize the value and uses

of leisure and seek some increase in it even at the cost of part of possible increase in his remuneration in order that he and his family may live more happily and more nobly. This is the real goal of improvement of the standard of living of the working class.

CHAPTER XV

HOUSING

Classification of Industrial Housing Problems

The problems connected with the housing of the working class in India are of various types. Industries have migrated into important cities and towns, such as Calcutta, Bombay, Cawnpore, Ahmedabad, Nagpur and Madras, where on account of the lack of town planning, limitation of space and high land values, factories, warehouses, railway stations and sheds, and working class quarters have been built up close together in disorderly combination, leading to some of the worst conditions of overcrowding and squalor in the world. Here more and improved housing accommodation for the industrial workers chiefly depends upon municipal housing, industrial zoning, regional and suburban planning, and development of cheap and quick transport services. Then there are the small towns and villages which have suddenly overgrown their normal size by being associated with industries such as jute, cotton, mining, engineering, and, recently, sugar manufacture. Here land is cheap and plentiful, but the increase of population and the expansion of the factory grounds have contributed to appalling congestion. Thus factory sheds and railway sidings have smothered such jute-mill villages as Bhatpara, Telinipara and Serampur of the Hoogly riverain which formerly used to nestle in mango groves and were famous for their temples, tols and bathing ghats. Railway, engineering and mining towns have similarly grown in different parts of India in and around the villages and have completely swallowed them up through the immigration of a large body of workers on the one hand, and the expansion of

factory areas on the other. The immigrant workers first had their accommodation in the huts of villagers and more huts were built as they came in larger numbers. But today the village has receded with its temples and orchards, and bathing ghats have been enclosed within factory walls. In its place single-room ramshackle bustees have been built chiefly by private landlords and employers, frequently back to back, utilizing all available space; and instead of the village streets lined with trees we have narrow winding lanes, full of rubbish and garbage through which the workers approach their hutting. The problem of housing here is that of co-operation between the employers, the municipality, and the landlords, whose divergent interests have somehow or other to be reconciled. Thirdly, organized industries have been established in virgin areas, as in Jamshedpur, Kharagpur, Maubhandar, Dehri-on-Sone and Golden Rock, where the employers find it indispensable to provide housing and essential services to stabilize the labour force. Mining settlements at Jharia, Bokaro, Giridih and Kolar, or the plantation villages in the Bengal Dooars and Assam, are also employers' creations. The question of housing accommodation here rests entirely with employers who have to make a virtue of necessity. Finally, there are the quarry-men, stone-cutters, earth-diggers and road-builders in hitherto undeveloped areas who often have virtually no places to roost except flimsy grass and rubble shelters, mud dens and railway wagons, without even a proper water supply, not to speak of measures of health and sanitation. The enforcement of the contractors' responsibility in respect of housing can alone do away with this callous disregard of elementary human needs.

Slums in the Principal Cities and Industrial Towns

Adequate statistics as regards the present housing accommodation of industrial workers are available only from a few cities and industrial towns in India. Even for the city of Bombay we have no complete data. But the Census Officer's picture of congestion in this city has been revealing enough. If an average of more than $2\frac{1}{2}$ persons per room be taken as an indication of overcrowding, 96 per cent of the population

of Bombay will be considered to be overcrowded and housed so inadequately that the streets have to be used to supplement the sleeping accommodation. (There are also night-walkers and street-sleepers in Calcutta, Madras and Cawnpore as well). The following sections of the city show the worst forms of overcrowding: Byculla with 99 per cent of the families living in single-room tenements, Sewri with 89 per cent, Mazagaon and Parel with 88 per cent and Second Nagpada with 87 per cent. The workers in Bombay City live in mud huts thatched with cocoanut leaves, in corrugated iron sheds and in tenements or chawls. The tenements are 'standardized slums', dark and overcrowded, with unsatisfactory and inadequate facilities of water supply, cleansing and sanitation. The following table will show the distribution of taps in the old and new tenements of Bombay City.

TABLE XCIV

	Percentage of Distribution in	
	Old Tenements	New Tenements
1. 1 tap for less than 8 tenements	11	56
2. 1 tap for 9 to 15 tenements ..	44	33
3. 1 tap for over 15 tenements ..	44	11

Forty-six old tenements and one new one did not provide for any water taps at all.¹ As regards latrines, in most of the Bombay chawls there is one latrine for 8 tenements.

Enquiries were made by the Labour Office of the Government of Bombay in 1938 into the E, F, and G Wards of Bombay and the towns of Ahmedabad and Sholapur with regard to working class housing. The results of this survey are summarized in TABLE XCV.

In Ahmedabad, for which a housing inquiry was undertaken by the Ahmedabad Labour Union in 1937, out of 23,706 tenements 8,786 are not provided with the municipal water supply. Of these 3,117 have wells of some sort. In 5,669 tenements there is absolutely no provision for water. Where there is municipal water connexion, a tap or two is provided

1. Labour Gazette, May 1931, p. 893.

in the compound for a group of 200 or more families. Out of 23,706 tenements 5,360 have no latrines at all. In the remainder, the arrangement is grossly insanitary and inadequate.

The chawls, or tenements 3 to 4 storeys high, usually with single rooms for families of industrial workers are characteris-

TABLE XCV

*Housing Accommodation provided by Cotton Mill Owners
in Bombay in 1940¹*

	Principal working class areas in Bombay City	Ah- medabad	Sholapur
Percentage of families occupying one-room tenements ..	91.24	73.82	58.24
Number of persons re- siding in one-room tenements ..	3.84	3.95	4.31
Floor space in sq. ft. for one-room tene- ment per person ..	26.86	35.98	21.25
Per tenement ..	103.23	142.01	91.62
	Rs. As. Ps.	Rs. As. Ps.	Rs. As. Ps.
Average monthly rent for one-room tene- ments ..	6 14 4	5 0 4	2 5 3
All tenements ..	7 6 6	5 11 7	2 15 4
Proportion of average monthly rent for all tenements to average monthly income ..	17.07 per cent	14.09 per cent	11.39 per cent

tic of Bombay, Ahmedabad and Sholapur in the Bombay Presidency. They have been built by private landlords, employers and trusts in these cities. Often they are located close to the mills, which makes improvement difficult, while many are really unfit for human habitation. The following

1. Report of the Textile Labour Enquiry Committee, Vol. II, Final Report, p. 274.

table shows the accommodation provided by employers in Bombay, Ahmedabad, and Sholapur:

TABLE XCVI

Centre	No. of employers providing housing	Total No. of tenements	Single room	Double room	Three rooms and over
Bombay	21	4,301	3,354	939	8
Ahmedabad	28	2,749	2,282	467	—
Sholapur	5	1,547	1,238	219	90

It was estimated in 1929-30 that the employers' accommodation in Bombay city provided for 20 per cent of their workers and for 16 per cent of their workers in Ahmedabad.

For a few other cities of which we have any kind of tenement census, the following comparison will be of interest:

TABLE XCVII

City	Proportion of families living in single rooms, 1930
Bombay	89
Ahmedabad	73
Cawnpore	62.5
Nagpur,	
Jubbulpore,	
Akola and	
Gondia	60

For the industrial town of Cawnpore the census of 1931 has shown that 62.5 per cent of the total number of families live in single-room tenements, 24.8 per cent in two rooms; 7.5 per cent in three rooms; 2.9 per cent in four rooms and 2.3 per cent in five or more rooms. Cawnpore is one of the most glaring instances of an Indian city which has grown haphazard and where the factories have expanded on all sides in the very heart of the city. Thus we have an enormous congestion in some of the poormen's areas such as Talag Mahal, Sisaman, Lachhamanpurwa, Coolie Bazar and Butcherkhana Khurd, where the density of population per acre reaches between 600 and 1,200 as compared with the average

density of population of 57.8 per acre throughout the city area. Some 40,000 workers of Cawnpore live in the slum areas called ahatas, about 200 in number, in the city. Here small dingy huts usually 10'x9'x10' have been built by private landlords making handsome incomes out of the poor occupants who are denied sunshine and air, not to speak of water, light and conservancy. On an average as many as 12 to 15 persons live in these single huts. Quite a number of them are below the street level. Dirt and dust stream through the single front door unhindered by the gunny bag that is hung to secure privacy. Several of these ahatas depend for their water supply upon surface tanks and ponds that are inevitable sources of epidemic—cholera, small-pox and dysentery. The British Indian Corporation in Cawnpore has built 3 settlements, viz., the MacRobertganj settlement, the Allenganj settlement and the Kakomiganj settlement. There are in all about 1,700 quarters in these settlements, which provide housing for about 83 to 90 per cent of the workers employed in the various establishments under the Corporation. The accommodation provided by employers in Cawnpore comprises in the aggregate about 3,000 tenements which house about 10,000 persons out of a total of 75,000 persons employed in all the factories of the city. The percentage comes to only 13.3. A recent investigation of Mr. S. C. Chaturvedi has given certain striking results in respect of house shortage, congestion and high rents in Cawnpore. The enquiry which embraced all the important labour bustees of Cawnpore, excluding mill settlements, has revealed that about 96 per cent families occupy dwellings with either one room only or with two rooms each; their respective proportions being roughly two-thirds and one-third of the aggregate. The modal dimensions of the rooms are 11' x9'x11' or about 100 square feet in area and about 1,000 cubic feet in space. About 70 per cent of the rooms have one door each only. 46 per cent families depend on public taps for their water, the average pressure per tap being as high as 200 persons. No latrine arrangements exist for 26 per cent families, each public latrine having an average pressure of 761 persons. Families living in these dwellings consist in 52 per cent cases of 3 to 6 persons each,

though in some cases not exceeding 10 per cent the size of the family ranges from 7 to 12 persons each. If an average of more than 2 persons per room constitutes overcrowding, 47 per cent families but 69 per cent occupants live in overcrowded dwellings. The net effective demand for new suitable dwellings among the working class population which comprises roughly 152,000 persons and 44,000 families in Cawnpore, is estimated at 34,000 dwellings. 86 per cent families pay rents below Rs. 3-8 per mensem; while 62 per cent pay rents between Re. 1-8 and Rs. 3-8¹. During the period of the war overcrowding and housing famine have been very seriously aggravated in Cawnpore, the city increasing her population from 487,324 in 1941 to 625,137 in 1944, according to an estimate of the Town Rationing Authorities. The working class population employed in 32 leading industrial establishments is about 120,000 out of whom only 10,000 are housed in mill settlements or in government quarters provided by the ordnance factories. On the whole the present shortage of housing accommodation is estimated at not less than for one and a half lakh of persons. Many people have to sleep on the streets and pavements of the city.

The Bustees of the Hooghly Riverain

One of the industrial areas showing the heaviest concentration of industrial workers in India is the Hooghly riverain around Calcutta where approximately three-fourths of a million workers are to be found. Many mill towns and villages in this area have shown an increase almost unprecedented in demography. Between 1911 and 1921 the mill town of Bhandeswar showed a population increase approximately of 100 per cent; and between 1921 and 1931 Bansberia showed an increase of 123 per cent, Halisahar 129 per cent, Kanchrapara 45 per cent, Kamarhati 32 per cent, and Bhatpara 29 per cent. But the increase of Titagarh has even outstripped these figures. Here the population has increased by 300 per cent in one decade and 200 per cent in another. The zamindars who own lands where the factories have been established

1. S. C. Chaturvedi: Housing Conditions among Mill-workers in Cawnpore, U.P. Labour Bulletin, December 1941.

have built bustees, honey-combed with single rooms in the neighbourhood of the factories, or employers and mill sardars have obtained leases of land from them to construct huts for the workers. These bustees are an unplanned muddle of single rooms or huts which are usually built *en masse* so as to utilize the available space to the utmost extent. The approaches to the huts become filthy trenches in the rains and at other times of the year undulating tunnels full of rubbish and garbage, pots and pans that meet one at every step. Such is the manner in which these single huts are built up at all angles that there is little of the privacy which the Indian woman requires for her daily routine of household duties. The atmosphere is so foul that the working class mothers with infants at their breasts are compelled to come out to the lanes where their grown-up children play in the dust and dirt or splash through streams of sewage that spill over. The congestion of the huts will be evident from the following table:

TABLE XCVIII

Mill Towns		No. of inhabited houses per square mile
Titagarh	..	14,105
Serampore	..	7,656
Howrah	..	5,747
Naihati	..	5,639
Bhatpara	..	4,920

These single-room huts which have been given the respectable name of 'houses' are dark and dingy hovels, 8x6 to 10x8 feet in size, which are built back to back with no arrangements for drainage. Rent for these single room huts varies from Rs. 2 to Rs. 6, the usual rate being Rs. 2-8. The refuse water stagnates in the mud drains in front that collect the garbage of a dozen such huts so that normally the narrow lanes which give access to the groups of bustees are always soaked with dirt and filth, breeding flies and mosquitoes. The water taps are far away on the main road to which the narrow and parallel bustee lanes lead. Each tap is the scene of brawls and filthy abuses every morning. The latrines, if these exist, are too few and filthy so that men, women and children have

to use the drains and open fields at a distance. Inside the huts there is terrible overcrowding; 4 to even 16 persons are found living together in these 'homes' with goats and other animal pets which are favourites of the women. There is no privacy for the women, nor even adequate protection for them, in the bustee.

There are about 4,940 bustees in Calcutta covering an area equal to one-third of the city. The population in these localities is over a million. Conditions in the bustee areas visited by Mr Casey, Governor of Bengal, have remained revolting—open sewers gulching filth, swarms of flies, inadequate water supply, every sort of hygienic horror. Mr. Casey observes: 'Human beings cannot allow other human beings to continue to exist in such conditions—who is responsible does not interest me, my interest is only that conditions should be improved and that neither politics nor vested interests should prevent this.'

The jute mill owners have also built what are called 'lines' or pucca houses generally of two storeys, the rooms being placed in a line back to back. Sometimes a narrow verandah is provided, but this hardly improves ventilation. The total area available per worker in these employers' lines varies between 29 and 79 sq. ft.—which is hardly adequate for an adult, far less for a whole family. It is estimated that 53 jute mill owners have built 41,000 houses for accommodating 131,000 or between 30 to 40 per cent of their workers in Calcutta and the vicinity. It should be pointed out that workers in these mill 'lines' often lease out a portion of the accommodation to friends or relatives who may be working in another mill or be out of employment; thus the congestion in these 'lines' is often as great as in the bustees. In the Ludlow jute mill in Chengail 30 per cent of the occupants in the coolie lines work in the neighbouring mills and the average number of occupants per room is 3.98. The Oriya workers seem to live more crowded together, showing 5.0 as the average number occupying a room. A room in the coolie line is 9'x9'. Even in the new built coolie lines, there are inadequate bathing and latrine facilities. A typical instance is afforded by the Ludlow jute mill in Chengail where for 2,500

workers living in the labour lines only 56 taps for drinking and bathing water, 126 seats in the latrines and 40 urinals are provided. Tanks are met with in the jute mill villages and in times of an epidemic spread infection all round. Rents for single rooms in the pucca coolie lines vary from 8 as. to Re. 1-4, 12 as. being the usual rate. The gaunt and ugly employers' lines which are invariably the most crowded, stand in marked contrast with the spacious bungalows built for the supervisory staff not far from these on the banks of the Hooghly, laid out with beautiful gardens.

The Cheries of the South Indian Towns

Worse than the bustees in their planless confusion, squalor and insanitation are the cherries of such South Indian towns as Madras, Madura, Coimbatore, Tuticorin, and Cochin. Where the Panchamas dwell, filth and dirt are even more marked. Each single hut, as in Bengal, is made of mud and thatch or of old kerosine tin plates and the entrance to it is an aperture rather than a door. The average size of the hut is here reduced to 8'x6'—and the material is flimsier than in northern India, yielding more easily to rain and storm which are frequent. Inside each hut, complete darkness reigns even in day time, while there is overcrowding of the worst kind. Mahatma Gandhi's description of the cherries of Madura may be given here: 'One cheri I visited is surrounded by water and drains on all sides. In the rainy season, it must be a place unfit for human habitation. Another thing is, it is below the road-level and all these places are flooded during rains. The cottages in all the three cherries are built anyhow. There is no layout of the streets or lanes, and cottages in many places have no vents worth the name. In all cases without exception they are so low that you cannot enter in and get out without bending double. And in all cases, the upkeep of the place is certainly not even to the minimum sanitary standard.'

In the city of Madras there are about 200 such cherries, of which more than half are owned by private individuals, 26 by the Government, 25 by the Corporation and 27 by trusts. In these are quartered about one-third of the population of Madras. A survey has revealed that 35 cherries, where about

15,000 persons live, are not provided with municipal water supply. 134 cherries occupied by 183,000 persons have only 460 water taps. Only 12 cherries have an adequate supply of taps. In respect of latrine accommodation, 72 cherries have none at all while 109 have 121 latrines with about 1,200 seats.

Another investigation recently undertaken by V. A. Madhavi reveals the extent of overcrowding as follows:

TABLE XCIX

No. of Rooms	No. of Dwellings
1	835
2	88
3	16
4	1
Total overcrowded ..	940
Total No. of working class dwellings in streets ..	1,490
Percentage of over-crowding ..	63.1

It has been calculated that about 19 per cent of the income of the working classes goes for rent.¹ In the cherries, the dwellings consist as a rule of one room huts of more or less the same size. Overcrowding is less in the street houses than in the cherries.

Many of the cherries have been constructed on low lying lands without adequate drainage, and the present writer still remembers how he waded through knee-deep water in order to reach some cherries during a strike in Madras. During the rainy season most cherries in the South Indian cities are surrounded by stagnant pools of foul water, which is replenished constantly by drainage from the roads and high grounds on all sides. Rents of these single rooms are exorbitant, ranging from 8 as. to Rs. 2, giving opportunities to landlords, not excluding municipalities and temples, to exploit the situation by building more and more of the flimsy huts, at all angles, and utilizing all available space and leaving them without repairs for a considerable time. No wonder that the untouchable castes who are denied social opportunities of improve-

1. The Eastern Economist, October, 1943.

ment of their manner of life and who live under such vile and wretched conditions, seek to forget their hard day's toil and their unwholesome living conditions by drink and gambling, while there wallow in the mud and filth around them herds of pigs which are the legitimate scavengers in the cheries.

Conditions of housing are markedly superior in the four villages established in Madras by the Buckingham and Carnatic Mills with about 659 houses. The houses usually consist of a living room, a kitchen, a washing place and a front verandah and yard. The lay-out is spacious and roads are lighted with electricity. It is estimated that only about 10 to 15 per cent of workers in the two mills have been accommodated in these model villages. The vast majority of industrial workers in the city of Madras is crowded in the insanitary cheries while many have no shelter but sleep on the streets or on the verandahs of godowns and shops.

The Dhowrahs of the Coal-fields

The housing of the mining labour population presents certain problems different from those in the case of other industrial workers. Many coal mines close down after a period of working, and labour has to shift. Often the displaced labour moves into the bigger mines where already the accommodation for the permanent labour force is limited. There is a tendency for the miners to settle down in the larger and better organized collieries, and there is, therefore, chronic shortage of accommodation especially because the unemployed wait in the dhowrahs in search of work. These dhowrahs or miners' quarters are built usually by colliery proprietors from the point of view of the minimum permanent labour force required by them. On the other hand, quite an appreciable proportion of the miners, estimated at about 15 to 20 per cent comes from the villages near by and would not stay on in the dhowrahs. In the colliery dhowrahs 85 per cent of the miners' families are living in 1-room houses, and 10 per cent in 2-room, 3 per cent in 3-room and only 2 per cent in 4-room houses. The Jharia Mines Board of Health has laid down that a minimum floor space of 33 sq. ft., and an air

space of 333 c. ft. must be allowed for each adult and half such space for each child under 12, and the minimum dimensions of the room should be such that a family of 2 adults and 2 children under 12 can be accommodated in it. The Board's standard of 10x10 sq. ft., while it is by no means adequate according to physiological requirements, is disregarded in the case of temporary huts which are built for miners, with a floor space of even 70 sq. ft. The cubic space for an adult should be at least 500 ft., and the cubic space for a family should not be less than 2,500 ft. Thus the bye-laws of the Mines Board would require drastic amendment. But even the present legal accommodation is overstepped, many dhowrahs quartering between 4 to 7 persons instead of 2 adults and 2 children. This will be evident from the investigation of the Bihar Labour Enquiry Committee.

Personal visits of the writer have revealed that a dhowrah is often occupied by 12 to 15 persons. New relations are brought in and especially in winter some of the worst forms of overcrowding are met with. Miners and loaders of the same village, caste, or gang prefer to live together in the rooms of one dhowrah; while those who work on different shifts often deliberately choose to occupy one set of rooms alternately.

TABLE C
Overcrowding in Bihar Coal-fields¹

Colliery	No. of houses	No. of adults per room	No. of children per room
Bhaga ..	58	5.6	.7
Joint Bokaro ..	38	5.4	1.9
Jitpur ..	46	5.3	.9
Khas Jharia ..	6	5.0	2.0
Jamadoba ..	140	4.9	1.2
South Kujama ..	16	4.3	1.0
Godhar ..	14	3.8	1.1
Sirka ..	10	3.4	.6
Kusunda Nayadih ..	13	3.0	1.4
Bhadruchak ..	58	3.0	1.0

1. Report of the Bihar Labour Enquiry Committee, Vol. II, Parts A & B, p.382.

It has been estimated that even under the existing minimum housing standard the accommodation in the Jharia coal-field, which is roughly 29,000 dhowrahs, for about a lakh of workers in this area, is too short and has to be increased by at least 20 per cent assuming that another 20 per cent of the workers come from the adjoining villages. Accommodation is especially necessary in the small collieries on the outskirts of Jharia. Only at some of the bigger collieries are some latrines provided for the dhowrahs, but these are grossly inadequate in number. Miners, especially the children, ease themselves too near the quarters and pigs do the work of scavengers, for though sweepers are employed by some collieries they are kept too busy in the quarters of the supervisory staff. In the dhowrahs for which piped water supply is provided the taps are too few and distant. It is found that in four collieries, there is only one tap provided for 75 to 80 dhowrahs, while in 20 collieries there is one tap for 34 dhowrahs. Thus the miners have also to depend upon wells and streams. Too few wells have been sunk, while it is often most inconvenient for the workers to carry water to their dhowrahs from distant sources of water supply during the summer.

Most collieries do not charge any rents in order to encourage the miners to reside permanently in the dhowrahs. In the Raniganj and Giridih collieries, the workers are provided with plots of land and also supplied with bamboos, bricks and tiles to build their own huts and settle permanently. The following table gives an account of the housing accommodation provided for miners employed in ten of the important collieries in Bihar.¹

The dhowrahs show different types such as stone or pucca brick work with arched roof, tiled roof, plastered flat roof or corrugated iron sheet roof as well as kuccha houses with thatch. It is these latter, which often are below the minimum standards laid down by the Mines Board whose inspection and prosecution are too infrequent to be sufficient deterrents.

At Kolar among the gold mining labour population the hutting consists of lines of bamboo cottages with corrugated

1. Report of the Bihar Labour Enquiry Committee, Vol. III, Part B, Book 3.

TABLE CI

Colliery	No. of houses provided by employers	No. of labourers
Saltore	370 (pucca tiled dhowrahs 16'x12' with verandah)	1,080
Sendra	441 rooms	940
Loyabed	208 ,,,	470
Jamadoba	1,153 dhowrahs, built by the employers, and 389 belonging to the workers	
Malkera-Choitodih	424 dhowrahs	3,170
Sijua	642 ,,,	2,147
Lodna	1,550 ,,,	2,301
Bararee, Jealgora	Dhowrahs provided by the employers, number not available	5,104
Kargali, Bokaro	3,092 rooms	2,352
Argada	616 dhowrahs, 160 temporary huts, 12 two-room quarters for skilled workers	4,793
		2248

iron sheet roofs which make the accommodation unbearably hot during the summer. Here are quartered several thousands of immigrant miners and the overcrowding is terrible. More than twenty years ago the present writer described the unsatisfactory conditions of drainage and sanitation, especially the paucity of latrines, and was threatened with a law suit for several weeks, the interval being used by the authorities concerned in increasing the number of taps and the latrine accommodation in some measure!

The Leafy Shelters in the Quarries

In the big mines and quarries at Noamundi, Gua and Mosabani the congestion in the bustees is appalling and overcrowding intense, but there is a systematic endeavour to secure proper water supply. But even here the supply is not adequate. In all the smaller mines and quarries in Singhbhum and in the mica mines in Kodarma and Hazaribag the hutting is most unsatisfactory while the water supply is ab-

normally insufficient: In both Hazaribag and Singhbhum it is not easy to excavate wells, while hill streams are a precarious source of water supply. Thus when water is brought from a distant stream on lorries, there is great clamour among the workers in the mica mines who have to accept severe rationing of water. Elsewhere in the more distant ore mines and stone quarries the hutting is a mere apology for housing, while the individual worker is left to his own resources to collect water from any source and store it in his hut. More serious than the effects of overcrowding and scarcity of water supply are the dangers of epidemics in the distant jungles and hill sides, where men and women have to work under the hot sun at places several miles from the source of water supply and carry their drinking water in their own receptacles. In these jungle areas there is no attempt to deal with an infectious disease. The present writer remembers with horror and shame the case of a cholera-stricken worker in an ore mine left unattended by the side of its working face in the Singhbhum jungle. In fact throughout the mining, ore and quarry area in Bihar isolation wards exist only in Jharia, Jamshedpur, Serampur, Giridih and Noamundi, for the treatment of cholera, small-pox and other infectious diseases which are rampant among the working class.

For the quarry workers, principally employed in excavating slate and lime-stone in inaccessible jungles and hills by contractors, there is very often little arrangement for housing. The quarry men and women obtain grass, tree leaf and thatch for themselves and build their own flimsy structures. These are mere leafy shelters, so low that one can only crawl in and out of them. Yet cooking, sleeping and nursing children have to be done there, while there is no protection against the blazing sun in summer and the heavy downpour in the rains. For many in the quarries the railway wagons into which they load stones serve as the only shelter. For quenching the thirst of the entire family they carry water in brass-ware vessels to the working faces. Fortunately quarrying is not undertaken throughout the year in all cases; and unfortunately the class of workers engaged in this job is such as can bear untold privations and hardships without demur.

The Bustees and Barracks of the Plantations

The problem of housing the workers in the plantations markedly resembles and at the same time differs in some measure from that in the mines. Labour has to be recruited from considerable distances in each case, and hence the management has to make the conditions of housing, health, and sanitation tolerable. But while the mines are mostly situated in the plains, the plantations usually lie on high altitudes and in areas where the rainfall is abundant, if not excessive. Thus the tasks of the management in making satisfactory arrangement for health, housing and sanitation are more difficult in the plantations. On the other hand, while in the mining area there is sometimes considerable difficulty in obtaining spacious sites for housing schemes, there is no dearth of land in the virgin jungles. In the plantations, the usual housing accommodation adopted is of the bustee type. Long lines of barracks with iron roofs and brick walls or bamboo huts with thatched roofs are built usually along the banks of streams or small channels, and the usual defects of congestion, lack of light and ventilation, and insanitation are met with. There are also hamlets consisting of small groups of separate huts scattered among the cultivations on high and low ground, the coolies building their huts on receipt of advances from the gardens. These present a sharp contrast to the common barrack or bustee lines and seem to be preferred by the aborigines, who want to live in separate paras or tolas as in Chota Nagpur. The lanes are narrow and crooked, and littered with garbage and washings, and with the excreta of cattle and goats which are frequently found here. There are no separate cowsheds, an adjoining room serving to shelter the animals. The present writer obtained access to the gardens in the Bengal Dooars reaching up to the frontiers of Bhutan and can bear testimony to the severe congestion in the garden bustees—which is aggravated by the labourers' predilection for animal keeping. The huts are built at all angles in short or long blocks as space permits; and also back to back. The writer was present when a fire broke out, destroying about half a dozen huts in an incredibly short time. The danger of fire outbreaks is serious in summer; while during the rains

the pathways to the bustees become small channels and there being no plinths water flows into the huts, when their inhabitants are compelled to go without cooking and perch themselves on earthenware vessels, their only belongings. In the Surma Valley in Assam, the inundation of bustees by floods from rivers and channels is an annual occurrence, when men, women and children are found to be huddled together in the huts along with cattle and goats. In the Darjeeling tea estates and in the plantations occupying hill sides, as in Coorg and Travancore, the lines of labourers' huts are similarly located on sites lying on the banks of streams, and dangers of water-logging or inundation are equally recurrent. Bathing and washing arrangements are seldom met with in the plantation bustees, although piped water supply is found in a number of gardens. There is hardly any latrine accommodation in a plantation. The labourers use the field and the jungle for nature's calls. In moist regions the sanitary disposal of excreta is much more necessary than in the dry mining tracts of Bihar. The sudden outbreaks of cholera in an epidemic form and the prevalence of hookworm disease testify to the dangers of lack of provision of latrines, and sanitary bathing and washing places for the labourers. Where the bustees and their surrounding areas are not adequately drained, malaria and pneumonia become endemic causing a heavy mortality, especially among women and children. In both Assam and the Bengal Dooars the scourge of insect outbreaks also can be imagined only by those who have gone to these jungles in the long rainy season.

Programme of Housing Development: Improvement or Development Trust Housing

One feature which stands out after this brief survey of housing conditions for different industrial centres and classes of industrial workers is that no uniform method of action or organization can deal with the present unsatisfactory situation. Industrial housing in such big cities as Calcutta, Bombay, Ahmedabad, Cawnpore, Madras and Howrah can only be successfully dealt with by a statutory body like an Improve-

ment or Development Trust. Such Trusts have no doubt been set up and organized for Bombay, Calcutta, Madras, Lucknow and Cawnpore. In a few other cities the question of establishing an Improvement Trust is under contemplation. Without going into the details of their policies and programmes it may be worth while to indicate briefly the aims and objects of such Trusts with special reference to the housing of the urban working class. First, an Improvement Trust should definitely set before itself the tasks of 'zoning', development of special industrial districts or suburbs, reservation of special areas for working class housing schemes, and orientation and co-ordination of transport services for the region. For these the Trust should be aided by a Town Planning Act. Secondly, the Trust should carry on schemes of slum clearance and provision of working class housing simultaneously. Too often there has been slum demolition in India without developing new areas suitable for the poor men's quarters. This has resulted in aggravating overcrowding, especially in other slum areas. Owing to the lack of planned house development, slums have bred more slums. Thirdly, the Trust should be supplied with adequate finances by Government either directly through a subsidy or loan, or indirectly through the Government guarantee of debentures floated by the Trust for housing and development schemes. Acquisition of land from owners of slum areas by the Trust should also be made easier by the local Government, and the slum-owner should not be permitted to make profits at the time of the acquisition of land by the Improvement Trust due to the enhancement of land values as a result of the latter's efforts. The Trust's revenue from the enhancement of land values resulting from the improvement of roads and laying out of new roads should be increasingly devoted to providing new areas for working class housing. Often the Trust's activity is confined mainly to the re-planning and improvement of the better quarters of the city rather than of slum areas. Fourthly, there should be greater co-operation between the Trust and the Municipal Board or Corporation. The Trust commands the expert knowledge for tackling large and complex problems of housing and town development, and the Municipal Board or Corpora-

tion will do well in dove-tailing its policy with the constructive programme of the Trust. Thus where the Trust has prepared new areas for housing schemes and laid out roads, it should be possible for the Municipal Board to provide lighting, water and sewage facilities at its own cost. Similarly the Municipal Board may help the Trust in acquiring a slum area by declaring a certain block of houses unfit for human habitation. The Trust may then develop it and lay it out. In all the big industrial towns of India the complexity and magnitude of the problems brought about by the haphazard development of factories, workshops and railways in the past and the financial implications of the big schemes of housing that are required demand the establishment of Improvement Trusts and continual co-ordination of activities of the Municipality or Corporation and the Improvement Trust for both improvement of housing and health conditions and planned town development.

Municipal Housing

In the smaller industrial towns and villages where the incursion of an organized industry has bred slums, the task of improvement of housing conditions depends primarily upon the Municipal Board, and the co-operation of the employers and zamindars should be sought and, if it be not forthcoming, enforced. It is for the Municipality to lay down bye-laws and regulations in respect of housing and sanitation and to grant or refuse permission to employers to build factories and warehouses and workmen's quarters in certain areas. The Municipality should also formulate model plans of houses according to certain minimum housing standards and enforce the observance of these by the employers; while at the same time demolishing old houses unfit for human habitation, constructed by zamindars, sardars or lessees. It should lay down plans for the improvement of a bustee and compel the zamindars of the bustee to adopt these. The Municipal Act should be so amended as to enable municipalities to acquire land for building working class quarters or compelling the owners of bustees to make improvements according to a standard bustee plan. Every Municipality of a town exceeding 20,000 persons

should appoint a Health Officer whose duty would be to ensure that municipal bye-laws and regulations dealing with health, housing and sanitation are efficiently enforced. More than that. In industrial towns where a chronic shortage of housing accommodation becomes a menace to health, the Municipality should launch housing schemes especially for the working class. In Great Britain, the Housing and Town-Planning Act of 1909 made municipal housing compulsory where shortage was judged to exist. Another Act was passed in 1919 which made it incumbent on every local authority to build houses wherever there is shortage, under a scheme according to which it contributed the annual product of a rate of one penny in the pound towards the loss resulting from the scheme, the balance being met by the Central Treasury. 2.5 million houses are proposed to be built by the local authorities in a period of 15 years. Investments in building bustees and chawls in India succeed only by lowering standards of health and sanitation; and by permitting serious overcrowding. Such is the low scale of rents which industrial workers can afford to pay that slums and slum-dwellers are on the increase in many towns from which the bustee or chawl owners gain the most in India as elsewhere. Private enterprise actuated by the profit motive is the bane of housing development in towns in India as elsewhere. In all Western countries constructive housing by the local bodies and the State has been universally adopted, and has virtually replaced private enterprise. In India it is now a question how the burden of the public housing schemes is to be met through the increase of municipal taxation, subsidy from local Government and contribution from the employers. The local Government should take the initiative and launch housing schemes in consultation with municipalities and Employers' Associations which have to share certain proportions of the deficit of such undertakings. Municipalities as well as the local Government may also aid the establishment of Co-operative Housing Societies, which will build houses that may be acquired by the workers on the hire-purchase system. This method of hire-purchase has been successfully adopted in the housing scheme of the Textile Labour Association in Ahmedabad, and of the Empress Cotton Mills in Nag-

pur. Long term loans should be granted to such Housing Societies by Government or the employers at cheap rates of interest, and municipalities should assist by opening up land, and providing plinths on which the workers could construct their own dwellings. Employers should also be assisted by municipalities to build model workmen's settlements by making available for them suitable areas of land at special rates and by providing lighting, water-supply and sewage facilities. In all schemes of municipal housing or employers' schemes aided by municipalities scrupulous care should be taken to prevent any unplanned development of the town on the one hand, and deterioration of the housing standard, in respect of capacity, dimensions and materials, on the other. For all housing must have an eye more towards the future than towards the present.

Employers' Housing

Outside the cities and towns—in plantations, mines, ores. Quarries and other industrial undertakings which have been located in hitherto undeveloped areas, the primary responsibility for housing is that of the employers. Since the employers have shirked that responsibility, causing a serious decline of the health, morals and standard of living of workers, it is high time that housing according to a minimum standard set by the Public Health Department of the Local Government, should become a statutory obligation of the employer who manages any undertaking in which more than 100 persons permanently resident at the site of the establishment are employed. This obligation should also be applicable to the contractor who employs a similar number of workers. In Japan under the General Mobilization Act, 1938, the Ministry of Social Welfare may compel the larger factories to build workers' dwellings while the smaller and middle sized factories may obtain loans at reduced rates for the building of workers' dwellings. Such loans are supplied by guilds, public corporations and other financial institutions, which receive subsidies from the State, or directly by the State itself at low rates of interest. The prefectoral regulations in application of the Factory Act have been so amended as to bring within the pre-

fet's competence questions of factory workers' housing. Nothing short of similar compulsion can do away with the appalling congestion, squalor, lack of water supply and medical aid and insanitation encountered in the majority of the working-men's quarters in this country.

Mortality and Housing

The Indian worker in the village is accustomed to a higher housing standard than what the employers offer him in an industrial town. His dwelling in the village comprises at least two cottages one of which is provided with a thatched verandah, and he has enough of privacy as well as of sunshine and air. Often a courtyard provides an additional attraction especially for the women and children. In the industrial centre the deterioration of housing conditions has meant a decline of the worker's standard of living all along the line. The intimate connexion between unsatisfactory housing, mortality, intemperance and vice in India needs hardly to be stressed. From the public health statistics of the industrial towns which all tell the same sad tale of preventable suffering and mortality, we only quote four examples, one from the city of Bombay, the second from Cawnpore, the third from the jute mill area on the Hooghly and the fourth from Jharia. Child mortality is the surest index of the effect of unsatisfactory and insanitary housing on the working class family. In the industrial cities of India the rate of infant mortality is appalling.

TABLE CII
*Infant Mortality in Relation to the Number of Rooms Occupied,
 Bombay City, in 1921 and 1927¹*

		1921	1927
One Room	..	822	490
Two Rooms	..	322	203
Three Rooms	..	191	222
Four Rooms	..	133	195
Hospitals	..	190	88
General rate	..	667	316

1. Annual Reports of the Bombay Municipality.

The infant mortality rate diminishes with improvement in housing accommodation, being in the case of families occupying a single room more than double that of families occupying two rooms or more.

Mortality in the slum areas of an industrial town is far heavier than in the town as a whole or in the new sanitary settlements, built by employers, which, however, can accommodate only a fraction of the working class living in the town. This is instanced from Cawnpore.

TABLE CIII
Mortality in Cawnpore and its Workingmen's Quarters, 1921-1928¹

City		Percentage of the factory population	Average mortality percentage
Cawnpore city as a whole	..	40	46.32
Gwaltoli	..	60	75.29
Khalasi Lines	..	90	65.96
Rajpurwa	..	70	54.43
Colonelganj	..	50	46.44
British India Corporation Settlements	..	90 to 95	34.58

In Lachhmanpurwa, one of the mohallas that is predominantly working class the infantile mortality is 671 per thousand while in the Allenganj settlement it is below 450. The infantile mortality of the city as a whole is 433. Still-births were counted to be as many as 480 in the city in 1943. In all Indian industrial towns and cities the infant mortality rate is heavier than in the ordinary country-towns. A high rate of mortality of children below one year accompanies a considerable proportion of still-births. Abortion is also quite common.

Dr D. F. Curjel conducted an enquiry with regard to births and deaths of infants in the jute mill areas of Bengal. Individual enquiries among 132 women workers show that 102 have had among them 338 children born alive, 139 of whom were born while the mother was actually engaged in industrial work, and of these children born in industry 91 were alive to date. The infant mortality here is much higher

1. Report of the Royal Commission on Labour, Evidence Vol. III, Part I, pp. 153-4.

than that of Calcutta. Out of 132 adult Indian women, 30 said that they had never had children. Possibly many of these women were living irregularly and were ashamed to admit this. Owing to economic and family circumstances, some of them probably did away with their off-spring. It is difficult to obtain information regarding children born dead, and it is probable that the total number of pregnancies is greater than actually stated.¹ Throughout the jute mill zone death rate is high, and higher in the bustees than in the pucca lines. Reliable figures are not however available. From the Ludlow jute mill, Chengail which maintains accurate records in respect of labour conditions and welfare, we find the incidence of sickness between 1929 to 1943 averaging 20 per cent of the labour population. Respiratory and gastric affections are the most numerous, and the majority of deaths are due to pneumonia and other allied diseases. Dampness, lack of ventilation in the huts, and the dusty occupation are the predisposing causes.

In the Bihar coal-fields out of 1,030 families investigated by the Bihar Labour Enquiry Committee, 327 or nearly one-third reported the deaths of 523 children, of whom 250 died within a year of their birth; 125 died before the age of 3, and the remainder died before they reached 15 years. The rate of infant mortality works out at 243 per thousand. Still-births were 8 in number, representing about 8 per thousand. The Jharia Mines Board of Health figures of still-births are given below:

1935	..	..	2.81
1936	..	..	2.68
1937	..	..	3.27

The excessive mortality of boys and girls before they reach their prime reflects the unwholesome environmental conditions including the effects of child labour.

The Prevalence of Vice

The absence of adequate housing accommodation has brought with it a serious disparity between the proportions of sexes which is responsible for prostitution and spread of vene-

1. Curjei: "Women's Labour in Bengal Industries", p. 21.

real diseases from the industrial towns to the villages. Such disparity is the largest in the mining settlements, but all industrial towns show the preponderance of single male workers who have left their families behind. The number of women per thousand males in some industrial cities is given below:

Calcutta and suburbs	..	500
Jute mill towns in Bengal	..	526
Bombay	..	524
Cawnpore	..	698

For the working class population, if the figures were available separately, the number would show an even greater disparity. Such disparity is most marked in the age groups 25-30 and 30-35. The separation of sexes, no doubt, has its worst effects just when married life should begin. Among the immigrants from Midnapore who come to the jute mill villages in Bengal, out of 300 women workers one in three admitted being a prostitute, and among the people born in Hooghly, one third of the families work in the mills of whom one in every four is a prostitute. Adjacent to the bustees and sometimes even in their very midst are brothels and liquor shops offering an easy and cheap temptation to the workers for 'decreation'. Herds of prostitutes are seen in every jute mill town, soliciting in the lanes every evening. There are, besides, women workers who are prostitutes in the night and do not usually admit this. Many are lured to vice by the poverty of the family. But the Bilaspuri working women are notorious for their immorality and are usually segregated from the bustees or the coolie lines. It is reckoned that for the jute mill village of Birlapur the prostitute colony that is not far from the coolie lines comprises as many as 200 prostitutes. The physician in charge of the mill dispensary estimates that about 80 per cent of them are suffering from venereal disease, infecting hundreds of workers every night. The prostitute is regarded not only as inevitable but as necessary in the modern industrial town or village, assuring stability to the labour force, and in fact many employers as they build bustees and bazaars provide accommodation also for brothels in the mill neighbourhood. The 'single' man comes back to the village tainted and diseased, while the women workers lose their self-

respect and virtue and are looked down by the village population. In the thousand slums of the Indian industrial centres, manhood is, unquestionably, brutalized, womanhood dis-honoured and childhood poisoned at its very source. The village social code is repelled at this and discourages workers from bringing their wives with them into the industrial centre. In a country where there is early marriage, the young worker who has begun his sexual life comes alone and is exposed to the temptations of the town. For here liquor shops and gambling dens adjoin the bustees, and prostitutes are found fairly in herds soliciting even in the daytime from next door. Besides the prostitutes there are many women in the bustee, usually of the low castes, who are unattached or have been deserted by their husbands or paramours and who anxiously seek male protection. Unaccustomed to strenuous toil the worker wants relaxation, but the relaxations that are offered him are drink, gambling and prostitution. Accustomed to an outdoor life in the villages, he comes with a virtual immunity from malaria, hookworm, and probably dysentery, but with an increased susceptibility to certain other parasitic infections in the crowded, unhygienic urban environment. Nothing is easier for the worker than to catch infections in the crowded insanitary bustees; and yet nothing he dreads more than the loss of wages and employment through sickness and disease, which levy a heavy toll and impair his efficiency and earning capacity.

Housing Problem, Central for the Efficiency of the Worker

The remedies are connected with the central problem of housing. If we can place the industrial worker in a healthier and more wholesome environment, his thrift and moral restraint will be revived and he will have a new desire for improvement of his standard of living, now repressed by the denial of those elementary attractions and amenities which he associates with his home in the village. Not seldom do we find the two-room village cottage with bamboo and clay walls and thatched roof overhanging a comfortable verandah rehabilitated outside the bazaar or bustee in an industrial town. Here the men and women can live a real family life, but the rent

charged is much higher than in the mill line or bustee. Improved housing is the first step towards an improvement of the standards of living, behaviour and morals of the Indian industrial worker. With all these will come the conquest of preventable disease and mortality and improvement of health and output. The problem of housing is, undeniably, the most central for the efficiency and well-being of the Indian working class. To those who assert that India cannot afford to spend more money for industrial housing, there can be only one reply—that she can no longer afford to delay such expenditure. She should immediately prepare a 10-year or 12-year Government plan of rapid and orderly post-war building construction for the housing of the working classes, as in Great Britain, that will be subsidized by the State. The building industry will give employment to large numbers of workers who will, in the post-war period, be deflected from several lines of war production.

CHAPTER XVI

SOCIAL WELFARE AND SECURITY

Legal and Actual Hours of Work in India

In spite of the rapid increase of the number of factories, it has to be admitted that climate in the major part of the year makes labour particularly irksome in India. In many Indian factories the temperature in the hot weather rises even beyond 120° , while the air is also hot, stagnant, and full of dirt and dust. Improvement of efficiency of the Indian industrial workers is intimately connected with the reduction of hours of work and improvement of atmospheric conditions in the mills, and with welfare work. The demand for a reduction of hours of work in this country is not only based on securing for the workers adequate leisure to enable them to improve their standard of living and discharge their duties as citizens, but also for providing for them humane conditions under the rigours of the Indian climate. The Indian Factories Act has laid down a fifty-four hour week and a ten hour

day for adult workers in non-seasonal factories and a 60 hour week and an 11 hour day for seasonal factories. For the mines the weekly hours are limited to 60 above ground and 54 underground. The actual hours of working are, however, much shorter than the legal hours. In 1938 it was found that in the perennial factories in India, 29 per cent of the men workers and 31 per cent of the women workers did not work for more than 48 hours a week; and 36 per cent of the men and 43 per cent of the women workers in the seasonal factories did not work for more than 48 hours a week. The data of the hours of industrial employment in the factories in Bihar, available for the Bihar Labour Enquiry Committee showed that 43.2 per cent men and 39.8 per cent women respectively in the perennial factories did not work for more than 48 hours a week, and 38.5 per cent men and 40 per cent women workers in the seasonal factories did not work more than 54 hours a week.¹ Further, 43 per cent of the perennial factories and 38.5 per cent of the seasonal factories in this Province worked hours which were less than those prescribed by law.²

So far as the miners are concerned the maximum hours of work permitted by law are rarely worked. Both in Jharia and the Raniganj coal-fields the hours of work for the miners and loaders who represent the most important classes of workers do not exceed 44 a week underground and 45 in open workings. Since a considerable and increasing percentage of workers is working less hours than are prescribed as maximum by the Indian Factories Act, the time has come for the amendment of this Act in order to reduce the working hours. Between 1934, when the present Act was last amended and 1940, efficiency methods have been introduced in certain fields of industry causing unemployment which was especially aggravated in particular branches of production by the trade depression. Thus the reduction of hours of work might spread out available employment among large number of workers as in the Western countries. In the West both rationalization which increased industrial output, and increase of unemployment were the major factors in reducing working hours to a 40 hour

1. Statistics of Factories for year ending December, 1938.
2. Report of the Bihar Labour Enquiry Committee, p. 69.

week in many countries. In Soviet Russia a 36 hour week prevails in some industries; while in the United States there is a movement for a 30 hour week which had been gaining strength prior to the present War.

War-time Hours in India and in Other Countries

In all countries, and especially those engaged in war, the programme of reduction of hours of work has been interrupted. In Great Britain the total working hours were extended to a maximum of 60 per week, which, however, could be exceeded to meet sudden and unforeseen emergencies. The 55½ hour week spread over 5½ days was adopted in the cotton industry. But the 60 hour week was worked by many munition factories. After the fall of France working hours increased to 70-80 hours per week in all industries associated with war production, but the output dropped within a short period, labour wastage became high in some factories, particularly when large numbers of women were employed, while unexplained absences of short duration rose with the increase of hours. Such absence was due often to the desire for rest or for change from the monotonous conditions of work. Thus the hours of work had to be reduced.¹. The British Select Committee on National Expenditure recommended that hours of work should be reduced immediately before the health of munitions workers was seriously affected, as happened in the last war; and suggested that the shift system was the ideal to be aimed at in every possible case. The Chief Industrial Commissioner, Great Britain, considered that 56 hours per week should be the maximum for heavy work and all should have one day's rest. The Industrial Research Board of the Medical Research Council, Great Britain, also recommended that weekly hours of work over extended period should not exceed 60 to 65 for men and 55 to 60 for women.

In the U.S.A., some industries connected with war effort adopted minimum working hours at 8 per day and 40 to 44 a week with an off for lunch. For women, two ten-minutes'

1. "The Labour Situation in Great Britain," D.L.O. publication; Medical Research Council: Industrial Health Research Board Emergency Report No. 2, 'Hours of Work, Lost Time and Labour Wastage'.

rest periods were prescribed. The National Defence Advisory Commission, U.S.A., formulated its policy in 1940 as follows: 'In order that surplus and other unemployed labour may be absorbed in the defence programme, all reasonable efforts should be made to avoid hours in excess of 40 per week.' In Soviet Russia the daily hours of work were extended from seven to eight. Work carried out during six hours in the day was extended to seven hours except in unhealthy occupations. The 6-day week (5 days' work followed by a day of rest) also gave place to the 7-day week (6 days' work followed by a day of rest on Sunday). In Germany the maximum hours were increased to 10 or 12 hours per day. In Japan the hours of work were the longest among all the industrial belligerent countries but the increase of sickness, accidents and absenteeism compelled the Ministry of Welfare to intervene in 1939. Maximum hours of work were then fixed in principle at 12 per day including pauses. A break of not less than 30 minutes per day is allowed when the hours worked exceed 6, or of one hour where they exceed 10. Exceptions have to be approved by the Prefecture but should not allow for an increase of working hours on more than 7 days per month or of more than 2 hours per day.¹ In Australia the weekly average hours of work for all trades and industries are now 44.29 for men and women. In India in the jute and cotton mills the legal hours have been extended from 54 to 60 per week. Many of the jute mills have been working in the war period sometimes for as many as 66 hours per week. Such extension of working hours is intended to offset the loss of output due to coal shortage and strikes. In the ordnance, engineering and other industries connected with the war effort, the working hours were increased by as much as 20 per cent. Numerous exceptions were made regarding working hours, which in many cases increased to 66 per week, limits being imposed only by considerations of overtime pay and the effect of fatigue on output.² Experience during World War I has, however, shown that the adoption of long hours and overtime is a short-sighted policy

1. International Labour Review, March, August-September, October-November, 1940.

2. Annual Report on the Administration of the Factories Act in Bengal, 1940.

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2. Annual Report on the Administration of the Factories Act in Bengal, 1940.

and does not in the long run mean a high degree of efficiency in the labour force and therefore in the production standards, whereas reasonable and regular hours mean more efficient work. In the British munition factories where the hours of labour for men were increased to 70 to 90 hours a week during World War I it was found that the output actually diminished, while sickness and absence increased. Recent increase in mechanization, and the load and tempo of work bring about fatigue more quickly and a consequent fall in efficiency as measured by the rate and quality of output and accidents. On the whole, increased and better quality production in war time will be effected by having moderate hours of work, in India as elsewhere; and the war-time programme should aim at the maintenance of standards established in the last two decades.

Need of Organized Rest-Pauses

More urgent are the introduction of adequate breaks for all workers and the improvement of lighting and ventilation, and of seating, washing, and refreshment facilities. These are necessary both for the health of the workers and for their optimum output. Dr May Smith of the Industrial Health Research Board, Great Britain, observes: 'Even with normal hours of work, the long spells of 4 or 5 hours should be broken up, preferably by organized rest-pauses and not by accidental interruptions due to waiting for materials, etc. Most people can face with equanimity work of about 2 hours' duration, and can keep a steady pace but the prospect of 5 hours' unbroken work often exerts a retarding influence on speed.'¹ Hours of work in India should revert to the former average of 8 and 9 hours, and organized rest-pauses should be introduced, industry by industry, to prevent loss of efficiency, weariness, listlessness and accidents. It is found that the Indian worker has probably a greater degree of relaxation during rest than has the Western worker. This has been attributed to the latter's nervous tension, on account of which he finds complete repose only during sleep.² If this be so, the distribution of

1. "The Human Factor in Production", "Nature", August 1942.

2. Mason & Benedict: Indian Journal of Medical Research, July 1931, quoted in "Food Planning for 400 Millions," p. 84.

rest-pauses between intervals of work in factories will increase industrial efficiency and output in larger measure than is expected in the West. Fatigue and diminished efficiency may be as much the results of heavy work and abnormal hours as of the workers' lack of interest due to unbroken, repetitive work, whether physical or mental, and the psychological situation in the factory, especially connected with matters of supervision and discipline. But the chief causes of fatigue and deterioration of work in India are undoubtedly physical—uncomfortable temperature, inadequate ventilation and illumination, excessive hours, and hard work. Overtime should be avoided whenever possible; the introduction of shifts, and spreading out overtime among all available workers will work better than lengthening the working day. In Great Britain the overtime hours worked beyond 48 a week are paid at the rate of one and a half times the ordinary rate. This is also the practice in the U.S.A. In India overtime is fixed at one and a quarter times, and cases are frequent in which overtime is wrongly calculated to the detriment of the worker. The abrogation of restrictions on the hours of work leads to increased strain, especially because of lack of attention to atmospheric and lighting conditions in the Indian factories and to facilities for obtaining rest and refreshment likely to restore physical and mental vigour.

Need of Improvement of Lighting and Ventilation

Many factories have begun work in India in buildings which are too cramped, and do not admit of much improvement in lighting and ventilation, and in working conditions generally. Especially in small factories with corrugated iron roofs and with cramping of the machines, discomfort of workers sometimes exceeds the limits of human endurance in the hot weather. The Inspectors of Factories find it difficult to prosecute the mill owners, even where the ventilation falls short of the prescribed standard because structural additions or alterations would involve considerable expenditure. In small industrial establishments which abound in the country, such as rice, flour, and oil mills and shellac factories, the installation of mechanical fans and ducts is essential, but conditions are

allowed to remain as they are since industries and industrialists have to be encouraged. In respect of lighting, it appears that there is no prescribed standard. Improvement of working conditions is possible if no new factory be permitted to be started unless plans of the factory premises are previously approved by the Government. The Cotton Ginning and Pressing Factories Act, 1925, requires that cotton ginneries and presses should submit their building plans to the authorities for approval. But such previous permission should be insisted upon for all kinds of industrial establishments, the factory plans being generally defective in construction and ill-adapted to Indian climatic conditions. In Madras the local Government has now made it compulsory for the plans of all new factories to be scrutinized by the Chief Inspector of Factories, before permission is given by the local bodies for construction. This procedure should be laid down by all Provincial Governments.

A 'Reasonable' Temperature

In the cotton mills throughout India, the atmospheric conditions in some departments, especially in the preparatory and the weaving processes, are unbearable. No wonder that the workers slack and loiter for several hours of the day. Certain weavers in a cotton mill recorded their experience before the Royal Commission on Labour as follows: 'In mills which have got fans we go out into the compound to smoke and we return soon, but in mills which have got no fans we have to go out for a longer time. Inside the mills where there are no fans the atmosphere is so very hot that people very often faint and have to be carried to the hospital. The conditions are unspeakable during the summer months.' It is necessary in the interests of both labour and industry that the Factory Act should lay down that a 'reasonable temperature' must be maintained in factories; and the Indian Factories Act should be amended accordingly. The Inspector of Factories should specify the measures necessary to reduce the temperature to 'reasonable' limits; and to enforce the adoption of these measures. In India Ahmedabad leads in respect of improvement in working conditions in the mill industry. Modern air-conditioning plants have been introduced into about a dozen mills and the venti-

lating and humidifying arrangements have also been considerably improved. Almost every mill in the city has spent considerable sums in securing comfortable atmospheric conditions for the textile workers. The highest inside temperature recorded on the hottest day of the year in one of the best sheds in Ahmedabad is only 88° when the temperature outside is 112° in the shade.

Artificial humidification which is to some extent necessary for successful weaving of certain classes of cloth in the cotton mills has serious deleterious effects on the health of textile operatives, against which the Trade Unions in Great Britain successfully protested. In England factory rules now prescribe the limits within which artificial humidification is permitted. In this country only the Government of Bombay have made similar rules which provide that, under certain specified conditions, no artificial humidification is permissible in any room of a cotton spinning or weaving factory by the use of steam during any period of the day when the dry-bulb temperature of that room exceeds 85°. Other Provincial Governments should adopt these rules, while amendment of the Factories Act is necessary for the maintenance of a 'reasonable' temperature, making it necessary to instal cooling plants in industrial establishments to conform to the standard.

Efficient ventilating and air cooling arrangements in the factories can alone counteract the very trying weather conditions in India. Such improvements are especially called for in the engineering works where a considerable proportion of workers undertakes 'hot jobs' in shops and departments where the temperature throughout the working period rises to intolerable heights. Many workers die of heat stroke under such conditions. The Factories Act should lay down a 'reasonable' temperature and empower the Inspector of Factories to prescribe measures reducing the temperatures in iron and steel mills to the standard. The Tin Plate works at Golmuri has adopted some improvements in this respect. Cooled air is blown on to the workmen exposed to the worst heat and furnace fronts and floors are cooled by water. Similarly for all cotton, jute and woollen mills, rice mills, cotton ginneries shellac, tea and tobacco-curing factories, the Local Govern-

ment should frame rules with regard to the installation of fans, and ducts for the removal of cotton, jute and wool fluff, rice, tea, tobacco and shellac dust, etc., which are generated in the manufacturing processes and are inhaled by the workers to an injurious extent, leading to pulmonary diseases.

Other Improvements of Working Conditions

In many industries where workers have to do their jobs before dazzling lights and use chemicals in certain processes, they should be provided with gloves, goggles and footwear. The local Government should make rules requiring all employers to provide necessary protection to the workers in such cases.

Given comfortable atmospheric conditions and protection against dust, dirt and injury, the workers are expected to show improved attention, efficiency and output. At Ahmedabad, it has been found that in the weaving shed production increased 4.6 to 9 per cent, due solely to improved ventilation arrangements. The installation of adequate air-conditioning plants in certain shops and departments where the workers have to do their jobs under abnormally high temperature conditions is calculated to improve efficiency and output to a much greater extent and lead to greater contentment of the workers, than the improvement of ventilation and lighting arrangements. Personal visits to engineering establishments have shown that in many shops the conditions are intolerable even in the cold weather. Some advantage may be gained in the Indian climate by adjusting the shifts and hours of labour differently according to the seasons. Thus the Buckingham and Carnatic Mills in Madras modify the shifts according to the seasons. For India in the hot weather the following distribution of hours may be adaptive: 5 a.m. to 10-30 a.m. and again 2-30 p.m. to 5-30 p.m. An experienced head of engineering works has pointed out that this will be a suitable adjustment and a definite forward step.¹

Of late night work has been general in the cotton mill industry. There are various physical and social disadvantages

1. Report of the Bihar Labour Enquiry Committee, Vol. IV, Part B, p. 167.

of night shifts. Under the present working conditions in the factories and the housing difficulty, night work has been more unfavourable to health and the family organization in India than elsewhere. The additional employment that night work offers is counterbalanced by the evil of fluctuations of employment, when more workers come to the industrial centre than can be employed. Under the present conditions of social life of Indian industrial workers in the city, night shifts promote greater family break-down and immorality as it denies them even the few opportunities for education and recreation that they may obtain. Along with the distance of the working men's quarters from the mills and the social habits of the workers, seasonal conditions also should be considered in determining the arrangement of hours in the factories. The Japanese arrangement of the two straight shift system, one from 5 a.m. to 2 p.m., and the other from 2 p.m. to 11 p.m. with half an hour's rest in each may be usefully adopted by the Indian textile mills.

In the Indian Factories Act and Rules, there is at present no provision for protection of workers against (a) use of unsafe loads on cranes and lifting appliances; (b) unsafe ladders, staircases, passage ways, etc.; (c) injury due to falling from unprotected platforms or elevated places; (d) splashes of corrosive acids, and fumes or gases generated in the manufacture or handling of such acids; (e) injury from splashes of molten metal, furnaces and hot chambers; and (f) flying chips and metal particles where the nature of the work produces them.¹ It is necessary that amendments of the Factories Act or Rules should provide for the above protection.

Regulation of Load and Shelter

It is necessary that workers—men, women and children—should also be protected against carrying loads which are too heavy. Several countries in the West have prohibitory regulations fixing certain maximum weights of loads up to which workers are permitted to carry. For adult women France has fixed the maximum weight at 55 lbs., and Great Britain at

1. See Evidence of Chief Inspector of Factories before the Bihar Labour Enquiry Committee, Report Vol. III, Part A, p. 37.

66 lbs. when the load is compact and rigid and in other cases at 50 lbs. Italy's maximum weight is 44 lbs. Soviet Russia has reduced further the loads to be carried by men and women workers and fixed the maximum at 40 lbs. Especially is such statutory regulation necessary in India for women and children workers in the mines, quarries, and the building industry. 35 lbs. may be fixed as the maximum load which may be carried by workers in India and the Indian Factories Act should be amended accordingly. The Indian Mines Act should also be amended with the same object, and the load and the standard of depth and lead should also be prescribed for both men and women workers. The Children and Young Persons' Act in Great Britain lays down in one section that no child up to 14 years of age should be employed to lift, carry or move anything so heavy as to be likely to cause injury to him. Experiments should immediately be carried out in India for finding out the reasonable load which may be carried by men, women and children under different conditions without undue physical strain.

Shelter during work and for rest is not available at all for workers on the surface of mines and in open quarries. Even in some factories personal visits reveal that workers are made to work outside, exposed to the elements. There is provision in the Factories Act safe-guarding the workers against this, but no rules have been framed by the Provincial Governments. Such rules should be adopted, and the numerical limitation of 150 workers for the factory in respect of the provision of shelter during periods of rest should be abolished. Rest shelters and refreshment rooms should be provided within factory premises, and should conform to standards prescribed by the Inspector of Factories. Women's accommodation should be different from men's in all factories employing more than fifty women. The Indian Mines Act and Rules should also be modified in order to provide an adequate shelter for the workers during rest. In quarries workers have to work under the sun; but on the surface mines shelter during work should be provided.

The Indian Factories Act contains a provision empowering the local Governments to require of factories employing more

than 50 workers to build creches for children and provide for their care. All Provincial Governments should make rules in regard to this. Creches are seldom provided in the jute mills of Bengal, for instance. In some mills creches are mere shelters for the infants and there is no provision for the feeding, comfort or even invigilation. An excellent creche has been established by the Howrah Jute Mill managed by Messrs. Jardine & Skinners, providing facilities for nursing, feeding, medical aid and teaching of over hundred infants.

Extension of the Factories Act to Small-scale Establishments

The Factories Act, 1934, is not applicable to power-driven plants where less than 20 workers are employed. But provision has been made in section 5 of the Act to empower the local Government to extend the Factories Act to any factory for all or any of the purposes of the Factories Act. In several industrial countries in the West the Factories Act is applicable to all industrial establishments where 10 or more persons are employed with or without the use of mechanical power. The numerical limit of 20 workers employed in any one day may be retained in the case of those establishments which do not use mechanical power, but it is desirable that the limit be reduced to 10 persons where mechanical power is used; and the regulation of non-mechanical 'factory premises' employing 20 or more persons may in the first instance be limited to the employment of child labour, sanitation and ventilation. This is calculated to effect an immediate improvement of the economic condition of a considerable number of workers now employed in such small industrial establishments as rice, oil, dal and flour mills, mica and shellac factories, tanneries, ice factories, saw mills, khandsaries and bidi, brick and tile works. In such establishments hours of labour are unusually long, woman and child labour is employed, and the conditions of health, lighting and ventilation leave much to be desired. Some rice and flour mills are known to work day and night with 2 shifts of 12 hours, without a break or recess, while even Sundays are not generally observed as holidays. Conditions are particularly insanitary in the tanneries and shellac factories. Some of these industries give employment to workers

in thousands. Bidi making for instance, gives employment to 42,000 persons in the Central Provinces alone, and the entire labour force engaged in it in the whole of India may be estimated at not less than 80,000 persons, many of whom work in small, dark and dingy rooms where 'they are crowded so thickly on the ground that there is barely room to squeeze between.' The same holds good of the overcrowded mica workshops. In many of these small establishments the labourers are not full-time workers; they work for supplementing their agricultural income and thus do not care much about the length of the working day: while the piece rate wages system gives opportunities of various illegitimate fines and deductions, the basic rates being the lowest compatible with the economic privations of the workers, men, women and children, who come to the work-places from the surrounding villages.

In Great Britain the Welfare Orders issued by the Factory Inspection Department have contributed a great deal towards bringing about the comfort and well-being of workers employed in various types of industrial establishments. Provincial Governments in India should similarly pass Rules covering such matters as supply of cooled water, arrangement for taking meals, shelters for rest, bathing and washing facilities, creches, ambulance and first aid requirements, etc.

Revision of the Indian Mines Act

Comfort and well-being are required even more for the Indian miners and quarry workers. It is true that Indian mines have not reached any great depth, those with a depth of 500 ft. being exceptional. But many mines are worked with primitive equipment and the working faces are both hot and ill-ventilated. In the smaller mines where modern machinery is not at all used both above and below ground, ventilation becomes unsatisfactory even at a small distance from the shaft. The provisions of the Mining Industry Act, 1926, of Great Britain should be considered for their applicability to the Indian mines. Exceedingly few mines have urinals and latrines underground. One result of this has been the heavy hookworm infection which has affected 90 per cent of the adult workers in Jharia. Few mines are supplied with cool drinking water

in the working faces, and the inconvenience of miners and loaders who sweat profusely in the hot weather underground had better be imagined. In the quarries the piped water supply should be as near the working faces as possible and shelters for rest should be provided. Quarries beyond a depth of 20 ft. come under the Indian Mines Act. But there are many quarries in the country where the Act is not enforced in spite of work being done beyond a depth of 20 feet. This is due to lack of inspection—which also accounts for violation of the regulation in respect of mining hours by mines in remote areas, such as the mica mines in the Dhab tract in Bihar. Local Governments should prescribe Rules for the improvement of ventilation and sanitary arrangements at the mines; while the quarries which have been neglected so far should come under adequate inspection and proper regulation in respect of shelter, water supply, sanitation, and housing.

Adult Education: Night Schools and Technical Classes

It is only after the elementary conditions of physical well-being are ensured that workers can take adequate advantage of welfare programmes, whether organized by employers, labour unions, local bodies, or social service agencies. The Indian worker is both ignorant and illiterate, and yet it is amazing how he has adapted himself to the needs of complicated machines and scientific processes. On the other hand, it has to be recognized that India's eastern competitor in the field of industry, viz., Japan, owes her superiority to the efficiency and adaptability of her workers chiefly due to universal literacy. In India the provisions so far made for either primary or technical education of workers are negligible.

Arrangement has been made in many centres for the education of workers' children but adult education has been grossly neglected. In Bombay and Ahmedabad several mills run evening or night schools for adult. The Empress Mills, Nagpur, has its welfare work department which has organized night schools in 8 centres and has several hundreds of workers on the rolls. Bustee meetings, lectures and *bhajans* are also organized in various centres, and libraries have been set up from which books are issued to workers. The Birla Jute Mills

in Bengal run several night schools, and also a library for the workers under the Labour Welfare Officer, which have proved a great boon for the workers. Most of the jute mills of Bengal run their own small primary schools or give grants-in-aid to schools run by the municipalities. The Buckingham and Carnatic mills have made provision for education of adults, with several technical classes. Night schools are run by the British India Corporation at Cawnpore with the present enrolment of 119 pupils. The E. I. Railway collieries in Giridih have made systematic endeavours to spread education among the mining labour population. These are now running 11 elementary schools, 4 lower primary schools, 1 upper primary school and 1 mining school. On leaving the upper primary school promising boys are given stipends for prosecuting a course of practical and theoretical training in mining in the mining school, which covers three years. The Tata Iron and Steel Works runs 9 night schools with the present enrolment of 692, along with a technical night school which gives training to the workmen of the Works as well as the associated Companies and contractors. In the technical school the courses cover a year and include general science, drawing, foundry practice, armature winding, workshop practice and locomotive. A large number of workers is benefitting from the technical classes under various experts.

A few years ago the International Congress on Technical Education laid down certain programmes of instruction of workers and especially considered vocational guidance and training, means of recruitment of instructors, guidance in salesmanship and publicity, use of the cinema and the technical press. Much advance has to be effected in respect of imparting technical education to the Indian industrial workers in order that they may attain the operative skill of their Western peers. Several establishments in India have organized apprenticeship classes as well as systematic courses for their workers in order to train them as foremen, chargemen and head sardars. All this has to be expanded and amplified for imparting technical education of a higher kind in a more systematic manner, at least for a few selected workers. Thus in a few selected centres like Bombay, Ahmedabad, Calcutta, Cawnpore and

Madras, the employers may pool their resources in maintaining technical schools for groups of promising men who may be given leave during working hours to attend the classes. The shop superintendents and foremen in particular mills should take part in such technical instruction. During my visit to Russia I saw in many industrial establishments the best experts and technicians giving free service for the technical classes which were being held during working hours for selected groups of workers. Without some sacrifice on the part of the technicians and without goodwill between employers and workers, the improvement of the operative skill of the Indian workers will take decades.

In Japan, according to an Imperial Order, which came into effect in 1939, every head of an industrial undertaking engaged in operations which appear on a schedule drawn up by the Minister of Welfare, and normally employing more than 200 workers over the age of sixteen, is required to organize a technical training course for a certain number of his workers. The maximum number of workers who are trained is 6 per cent of the labour force, and the training covers a period of three years which may, however, be reduced by the competent Minister. The Prefect or Head of the Mines Inspection Department supervises the equipment and programmes of teaching.

Technical education cannot go far without the basis of general education among the workers. For this we have to depend chiefly upon the municipalities and corporations in the chief industrial towns and cities of India introducing free and compulsory primary education for the workers' children. It is true that the Buckingham and Carnatic Mills, the Tata Iron and Steel Co., the Delhi Cloth and General Mills, the different Railway establishments, the Empress Mills in Nagpur, the Calico Mills, Ahmedabad, and several other establishments provide free education for the children of their workmen. But the great majority of the employers have evaded their responsibility in this regard, and this has been especially socially disadvantageous where industries have been located in remote or undeveloped areas with no municipalities or other local bodies. It is only the adoption of free and compulsory edu-

tion that can produce a better type of labour in the future. Recently the campaign for liquidation of illiteracy has spread among the industrial workers, and Universities and Colleges as well as employers have now begun to take an active part in the mass literacy campaign in India. The enthusiasm has to be maintained, nay strengthened and intensified on the Russian scale, in order that India may liquidate the present illiteracy of about 260 millions of persons over 5 years of age. Harold Butler has rightly remarked: 'As a cause of backwardness in comparison with Western nations, illiteracy in the East is far more potent than climate, especially when adequate health services have been established to deal with diseases.'¹

Inadequacy of Medical Care

It is, however, by no means true that health services and medical facilities are either efficient or adequate for the great majority of the working class population in this country. It is true that a few employers like the Tata Iron and Steel Co. in Jamshedpur, the Calico Mills in Ahmedabad, the Delhi Cloth and General Mills, and some jute mills in Bengal maintain an efficient medical organization and hospital equipment. Many employers also maintain dispensaries either with or without whole-time physicians. Some, again, pay contributions to municipal and other hospitals for free treatment of their workers. But other employers do not make any medical provision whatsoever, their plea being that the whole responsibility for medical service lies properly with municipalities or district boards. Even in the big towns there is so much congestion in the civil hospitals that few workers can obtain admission as in-door patients and considerable delay occurs in obtaining relief as out-door patients. No wonder that a considerable proportion of the workers go without treatment as TABLE CIV shows.

In most public hospitals in the towns and cities of India the present provision of beds is grossly inadequate. In many of the employers' hospitals and dispensaries the stock of medicines is meagre and the physicians appointed do not possess a registerable qualification or are often too old for giving the

1. "Problems of Industry in the East", p. 26.

necessary attention to a large number of patients, while where there are part-time doctors, the working class hardly obtains relief in serious illness, the former being naturally pre-occupied with cases in the families of the supervisory staff. In one mica mine visited by the present writer, the dispensary comprised only a small homeopathic box and the physician in charge knew nothing of modern medicine.

TABLE CIV

*Classification of Medical Treatment received by Workers
in Bombay Cotton Mills, 1930-31*

Kind of Treatment		Total Number of Cases	Percentage of Total
No Treatment		1,217	21.63
Country Medicines		2,249	39.97
Western Medicines		1,731	30.76
Country and Western Medicines		47	0.84
Patent Medicines		340	6.04
Patent and Western Medicines		7	0.12
		4	0.07
Patent, Country and Western Medicines		1	0.02
Other remedies including imperfectly specified		31	0.55
Total ..		5,627	100.00

It is necessary that the Provincial Government should make rules requiring, in the first place, all establishments that employ more than 500 workers to maintain a dispensary and a whole-time physician and secondly, the resources of different plantations, collieries and industrial establishments in undeveloped areas should be pooled by mutual agreement in order to maintain hospitals at convenient centres, with ambulance facilities to take patients to the hospitals from a distance. Many large collieries as well as plantations have satisfactory medical arrangements. There are for instance, 18 hospitals with 75 beds in the Bihar coal-fields. But in the small collieries as well as in the small plantations, the dispensary is hardly worth the name; while the compounder takes the place of a physician. It is for this reason that a statutory enactment is

necessary for any establishment employing more than 500 workers, to have a whole-time physician and an adequate stock of drugs as well as requisites of first-aid service. Central hospitals in plantation, colliery and quarry areas may be situated at convenient places serving a group of establishments. Bodies like the Jharia and Hazaribagh Mines Boards of Health should be established in other parts of India, and, as the Royal Commission on Labour recommended, these boards should be renamed Boards of Health and Welfare in order that their functions may include all general welfare programmes.

Existing Sickness Benefit Schemes

A strongly felt need of industrial workers in India is for some kind of provision during sickness. Many employers in India grant sick leave on full pay in addition to privilege leave. But it is interesting to record that a few establishments pay their workers a subsistence allowance (khoraki) of 12 as. a day for the period of illness on the basis of the physician's certificate. Among these are the Barauni Coke Plant, the Kirkend Colliery, the Central Jenagora Colliery, the Shalimar Tar Products (after 10 days' illness) and the Tata Collieries at Jamadoba, Dighwadih, Malkera and Sijua (for weekly labourers earning 10 as. or less per day). Miners and loaders are, however, not entitled to it as they are paid on the piece work rate system. The scheme of sickness benefits adopted in the Serampur Colliery, Giridih, belonging to the E.I.R., is interesting. The colliery has built up a Benefit Fund by obtaining 6 pies per rupee from the earnings of all miners and loaders although they are working under contractors. The following represents the benefits given to the workers from this Fund:

1. For sickness of workers—12 as. per week
for sickness of their children—4 as. per week
2. For birth—A lump sum of Rs. 3
3. For death—A lump sum of Rs. 3-8
4. For an orphan—6 as. per week, until he reaches 15 years
5. For a widow if she cannot work—10 as. per week until death

6. For physical disability not arising out of accidents—
 10 as. per week

7. Old age pension—12 as. per week

The collieries at Jealgora and Bokaro have similar Benefit Funds on a contributory basis. At Bokaro, the miners' contribution to the Fund is 6 pies per rupee of earnings, and that of the women and children 3 pies per rupee. The raising contractor also contributes 6 pies per rupee on all his bills. All fines and unpaid wages are also credited to this Fund. The Fund is utilized for sickness and maternity benefits, and for payments to orphans and widows as well as old-age pensions.

The Indian Copper Corporation, Ghatsila, has also instituted a sickness benefit scheme which applies to all grades of workers. According to this scheme, the workers make small monthly contributions on the following basis:

<i>Rates per day</i>	<i>Contributions</i>
All receiving 6 as and less ..	No contribution
All receiving 6 to 10 as. ..	2 as. per month
All receiving 11 as. to Re. 1 ..	3 as. per month
All receiving over Re. 1 ..	4 as. per month

In return, all employees when ill receive the following benefits: For the first 3 days of illness the employee receives no benefit other than free medical attention and medicine, etc. After the first 3 days of illness the employee receives half wage for the period he is ill and until the date he is declared fit to resume his duties by the medical officer. If the employee is an in-patient in the hospital, subsistence allowance is given as an advance on sick pay if required. The average contribution in 1937 amounted to Rs. 813 per month. Over a long period a small credit accumulated in this fund, but in 1937 the fund became insufficient to meet all the demands upon it. The debit, therefore, was taken over to Hospital account. This burden now being carried by Hospital account is reflected in part in the increase of expenditure in the first two months of 1938 at Rs. 9,124 per month.¹ A more satisfactory Sickness Benefit Scheme is that of the Empress Mills at Nagpur. Any worker can become a member of the Sickness Benefit Fund by contributing 4 or 8 as. per mensem to the Fund. Workers

1. Bihar Labour Enquiry Committee Report, Vol. III, Part B, p. 400.

paying 4 as. a month are on the production of medical certificate given an allowance at the rate of Rs. 12-8 per month up to 6 weeks and at the rate of Rs. 7-8 per month up to 8 weeks during sickness. The allowances are doubled for workers contributing 8 as. a month. No member has a right to sickness benefit unless he has paid two monthly contributions.

A Scheme for Compulsory Sickness Insurance

As in all other fields of social amelioration, the example of progressive employers should pave the way to compulsory sickness insurance. In all factories which employ more than 500 permanent workers, a compulsory and contributory sickness scheme, in which the workers, employers and the State will contribute, should be started. The scheme should be somewhat as follows:

Monthly contribution of:

Worker	..	5 as.
Employer	..	6 ..s.
State	..	4 as.
Total		Re. 1

The sickness benefits may be distributed as follows:

1. No benefit for the first six months after entering insurance
2. 6 as. per diem, after six months but before completing a year's insurance, from the fourth day of incapacity
3. 10 as. on completion of a year's insurance, from the fourth day of incapacity

These benefits will not accrue to workers in cases where compensation for accidents under the Workmen's Compensation Act or maternity benefits under the Provincial Maternity Benefit Act are provided. The U.P. Maternity Benefit Act, 1938, is more liberal and superior to the corresponding Acts in other Provinces in several ways, and its features should be adopted all over India. In India there are now 50,000 women employed in mines of whom 23,000 are employed in coal mines. In 1941 the Government passed the Maternity Benefits Act for women workers in mines, providing that the employer should give leave for a month to a woman worker before child-birth.

and that she should get a payment of 8 as. a day for four weeks immediately before and for four weeks following her delivery, provided that she was in continuous employment for 9 months preceding the date of her delivery. In several countries of the West the Maternity Benefit Acts provide for an authorized leave before child-birth for six instead of four weeks, and there women workers are excluded from the benefits of other schemes of insurance. In 1944 Maternity benefits were extended to the plantations in Assam, the rate being: Re. 1 per week for the period before confinement and Re. 1-4 per week for the period after confinement, provided the total cash payment is Rs. 14. In other employments the rate is Rs. 2 per week or average weekly wage whichever is greater.

The principles adopted in the Sickness Benefit Scheme are:

1. The insured worker and his employer share equally in providing the financial resources of the sickness insurance scheme. In Great Britain, Irish Free State, and in several countries in Europe, the workers' and employers' contributions are equal. In Japan also in the majority of insurance societies the employer's share is equal to that of the worker. In the mines and in the dangerous occupations the employer pays a higher amount than the insured worker.

2. The benefit given has no reference to the worker's wages and standard of living but is equal for all grades of wage-earners. In India it is necessary first to assure a minimum standard of medical aid and subsistence during the period of illness for all workers.

The Bombay Textile Labour Enquiry Committee has on the assumption of a sickness rate of 9 days per annum of the worker found that with a total contribution of Re. 1, the total expenditure for medical attendance, supply of medicines and subsistence during the period of worker's incapacity can be easily met. No adequate statistics are available in respect of the incidence of sickness among industrial workers in India. In Bengal where the incidence of sickness is heavier than in other Provinces, a scrutiny of dispensary records of two jute mills employing together about 6,000 workers shows an annual average rate of as much as 6.7 days of sickness per worker in 1944. The cost of medical attendance per worker comes

up to Rs. 2·4 per annum in the Bird and Heilgers group of eleven jute mills. An enquiry of the Labour Office, Bombay, has shown an annual average rate of 4·6 days of sickness per worker in Bombay. In Japan the number of days of sickness has been found to be about 6 per insured worker. The cost of free medical attendance has been calculated on the basis of Rs. 3 per annum for each insured worker, provided we can evolve here what is known as the panel system of medical aid of the West. On the basis of the above calculations the average permanent industrial worker in India earning Rs. 20 per mensem will pay about a week's wages per annum, and that is also the contribution of the employer for each insured worker in his establishment. The administration of the sickness insurance scheme should for the present be undertaken directly by the State. The compulsory sickness insurance plan should be supported by insurance against death on the basis of similar contributions from the worker, the employer and the State, amounting to another rupee per head. The State should entrust the management of life insurance for workers to a group of insurance companies in the country. At present a whole life policy for Rs. 550 without profits, starting from the twentieth year, can be given on the basis of an annual payment of premium of Rs. 12 realizable from the above scheme on a contributory basis. The shortness of the lives of Indian workers and the difficulties of medical examination *en masse* and of investigation and settlement of claims will, no doubt, increase the cost of insurance. But the margin can be increased through an enhancement of the State's contribution; thus an equitable scheme of both sickness and life insurance can be devised, which may reduce poverty among the workers that arises out of sickness, widowhood, and death, and at the same time would not endanger the insurance societies. The amount of benefit received through compulsory sickness and life insurance policy for each worker in India would cost the State only Rs. 42 lakhs, the total cost of the scheme being Rs. 6.72 crores.

For the protection of the Indian working class population, the development of a comprehensive system of social insurance on a compulsory and a contributory basis must be

deemed essential in which the worker, the employer and the State will all share their responsibilities. Later on, as the above simple scheme is worked for some years the benefits will be extended and the rates as far as possible related to the worker's wages and even to his family responsibilities.

It is much to be regretted that in the Health Insurance Scheme for industrial workers prepared by Prof. B. P. Adarkar in pursuance of decisions of labour conferences and the Government, the State does not come into the picture at all, the employers' contribution suggested being Re. 1-4 and the workers' contribution 12 as. The medical organization suggested will be based mainly on the principle of a salaried medical service although the panel system will prevail in certain limited number of cases. Mr Adarkar's report recommends that in view of the comparative failure of the Maternity Benefit Acts and of the Workmen's Compensation Act, and also in view of their great financial bearing upon health insurance, maternity benefit should be provided on an insurance basis in conjunction with health insurance, and the Workmen's Compensation Act should be scrapped and replaced by a scheme of insurance against industrial disability.

Provision for Old Age

Many employers in India have made provision for old age by means of a provident fund and a retiring gratuity. In Bihar the Tata Iron and Steel Co., the Tin Plate Company, the Associated Cement Co., the Dehri-Rohtas Railway and the Kumardhubi concerns, among others, have provided fund schemes covering workers drawing from Rs. 15 and over, or Rs. 25 and over, per mensem. Similarly in Bombay the Kohinoor Mills, the Swadeshi Mill at Kurla, the Ahmedabad Advance Mill and the Gokak Mill have provident funds which are open to all workers, the establishments contributing, as in Bihar, generally an amount equal to that paid by the workers. The institution of contributory provident funds for industrial workers has not met with much success, largely because due to low earnings they can ill afford to make regular contributions. Relations between labour and management in the majority of industrial establishments have also

been such as to destroy the confidence of workers in the security of the funds at the disposal of the employers. Many employers, however, have sought to stabilize their labour force through the institution of such funds and the Government by rules should make the provisions of the Provident Funds Act, 1925, applicable to these, so as to prevent attachment of the workers' contributions.

Railway establishments and some engineering firms pay a retiring gratuity to their employees after a period of service. The Bird and Heilgers group of jute mills in Bengal pay a retiring gratuity of Rs. 8 per month for men and Rs. 6 per month for women workers after a minimum of 25 years of satisfactory service. In the year ending March, 1940, a sum of Rs. 6,23,334 was paid to 424 workers in all by the twelve jute mills of the group employing on an average about 40,000 workers. Workers in India especially of the lower grades cannot save out of their low earnings against old age, invalidity and unemployment, and find that their connexion with agriculture and the family has been broken. Gradually a permanent labour force is developing in many centres in India, and it is essential to make some provision against old age for the workers, who at the beginning of their industrial career might have had some agricultural holdings to fall back upon, but have now lost these. Government should make rules enforcing a scheme of Provident Fund for all permanent workers in an establishment employing more than 500 workers. Under the scheme all permanent workers, including those who belong to the lowest category, shall join the Provident Fund and contribute to it one-twelfth of their wages or earnings per mensem, the management also subscribing an equal amount. In mines, engineering firms and other establishments where work is of a particularly irksome or hazardous nature, a scheme of retiring gratuity should also be introduced, subject to the exemptions which may be granted by Government on the ground of the financial position of particular establishments. Without adequate provision against old age, invalidity and unemployment, it would be idle to expect quicker development of a permanent labour force in our industrial centres.

Unemployment Insurance

Unemployment insurance is now considered as a necessary safe-guard of the security and standard of living of the industrial population. Since the Great Depression, there has been rapid progress all over the world in respect of the adoption of unemployment insurance schemes. Twelve countries have now got compulsory unemployment insurance schemes, and eleven countries have introduced subsidized voluntary schemes. In India while there is no doubt about the ultimate goal being compulsory unemployment insurance, the best method of approach would be the introduction of voluntary schemes assisted by Government subsidies. Thus, employers should be encouraged to set up Unemployment Relief Funds for the payment of gratuities to discharged workers, according to the length of their service, the Local Government contributing a quota equal to the relief offered to the body of discharged and unemployed workers. At the same time the Government should start or subsidize relief works designed in particular to provide employment for unskilled workers. In Japan the Government authorizes municipal bodies to raise loans to finance such relief works and grants subsidies from the Treasury to meet half the labour cost of any scheme in which the cost of unskilled labour is at least 50 per cent of the total cost.

In the post-war period unemployment may be epidemic and may create grave social unrest, if not upheaval, unless it is tackled at least for a period of five years from the termination of hostilities by an effective unemployment insurance scheme. It will not be difficult to absorb the technical personnel and semi-skilled groups of workers in various industries and occupations immediately after the war, provided there is industrial planning in the country and a country-wide organization of employment exchange that may direct the migration of different types of workers, covered by unemployment insurance and also arrange for their training and re-training for the purpose of rehabilitation. As in the case of sickness insurance, unemployment insurance should be based on contributions from the worker, the employer and the State. Such an unemployment insurance scheme should after the end

of five years be dove-tailed into a wider scheme of relief of unemployment of a permanent character. This is essentially a long-term problem and is largely connected with the vicissitudes of Indian agriculture. With the average agriculturist's income varying from Rs. 15 to Rs. 25 per annum as compared with the national income per capita of Rs. 65, and with about 12 per cent unemployed among all workers in India, the bulk of whom are supported by agriculture, group insurance of agricultural crops and live-stock, supplemented by social assistance through (a) the relief of destitution, expanding the technique of the famine code, and (b) the establishment of a net-work of State rural hospitals and dispensaries would represent the beginnings of social security for the masses of the Indian population.

Responsibility of the Employers and the State towards Social Security

The *raison-d'etre* of any social security programme is, no doubt, the necessity of an equitable distribution of the profits and burdens, gains and hazards of an industrial civilization. An industrial community cannot endure without an equitable sharing of both the rewards and hazards. No country can enjoy stable industrial peace nor quickly progress in industrialization if it permits all the profits of industry to be enjoyed by employers, and the hazards of industry borne only by those who are least able to bear them. Some equalization of the purchasing power of the different social classes is the *sine-qua-non* of industrial progress.

State social security is now considered in all advanced industrial countries of the world as an indispensable chapter of the national programme to strike at the root of poverty, unemployment and disease. Its connotation, indeed, is gradually being extended and amplified. According to the Social Security Committee in the U.S.A., the contents of social security are defined in the following comprehensive manner: 'Security for employment (education, employment offices, resettlement and soil conservation programme); security in the availability of employment; security of reasonable standards of working conditions; security of some income while un-

employed; security of retirement income; of recreation; of self-improvement; of medical and hospital assistance; security of one's family in case of one's accident, invalidity, ill-health, or death.'

We may also quote here the following observations from the P. E. P. Report on the British Social Services as regards the employers' responsibility towards sickness, old age and unemployment insurance for industrial workers: 'Employers of insured workers are compelled to contribute to each of the three insurance funds in recognition of the need for maintaining a reserve labour force during periods of slack trade, and for maintaining the health and physical fitness of their employees at all times. In cases of unemployment and health insurance, and in that of old age pensions, the justification in principle of a compulsory contribution from the employer seems clear. Employers plainly have a responsibility for their laid off or temporarily incapacitated workers, and they should help to look after them, just as they do in fact look after any capital equipment which is not in use or which has broken down. They have also some responsibility for the welfare of their employees at the end of their working lives, and some progressive firms have long made provision for this on their own account.' Few countries in the world can bear comparison with Great Britain in her organization of the various public social services and her colossal expenditures on these. Her total expenditure on unemployment insurance and allowances, old age pensions, widows' and orphans' contributory pensions, comes up to £300 millions. The recent Beveridge Plan whose main features have been accepted by the Government in Great Britain envisages complete compulsory state insurance against every form of personal want and insecurity—sickness, unemployment, maternity, widowhood and death, and would cost the State about £500 millions, the remainder of the total cost estimated at about £800 millions being met out of the contributions from people with incomes, at the rate of about 5s. weekly per head and from the employers. The benefits for unemployment or complete disability have been fixed at 40s. weekly for man and wife; but these contributions may have to be raised. Family allowances of 5s. weekly for second

and subsequent children, together with services equivalent to 2s. 6d. per head weekly, have been foreshadowed. Everybody would receive 'retirement pensions', men at 65 and women probably five years earlier.

In India, social security has become imperative due to the present mal-distribution of income that has been seriously aggravated during the war period. This is a demand as much of social harmony and justice, prime objectives of any civilization, as of economic efficiency, the objective of our industrial community. For, just as the employer must provide for the wear and tear of the machinery and renewal of obsolescent and broken-down machinery, so has he also to replenish the wear and tear of human muscles and capacities as a result of sickness, maternity, accident, or old age, in the interests of the continuity of efficient production. India's per capita income is estimated at Rs. 65 or about £5 as compared with Great Britain's £76 per annum. This low per capita income in India will no doubt limit her expenditure on social security and on administrative services for dealing with want, disease, ignorance and squalor. However, a country's national income is not a fixed thing; improvement is possible through a better organization of economic resources and opportunities.

Now the priorities in the structure of social security in India should, in our view, be scaled in the following order: (a) the adoption of a minimum wage policy beginning with all unskilled workers in all industries and rising to semi-skilled and skilled minimums—to begin any programme of social security without minimum wage fixation is to put the cart before the horse; (b) sickness insurance provided by a fund created by the contributions from the employers, workers and the State and aided by a State medical service panel; (c) unemployment insurance. The three are interdependent. Without living wages a compulsory scheme of sickness insurance is impracticable, meaningless. A contributory insurance scheme is necessary as it aids towards the maintenance of morale and self-respect and the balancing between benefits and costs in the minds of the people. But contributions cannot be expected if the workers do not obtain a living wage nor are sure of their employment. Without fair wages the

incidence of illness and disablement cannot also be brought down. Without unemployment insurance, again, neither a living wage nor protection against sickness is of any avail. Finally no programme of social security can realize its full objectives unless there is strong, effective organized Unionism. Along with the five giants of Beveridge on the road to reconstruction to be attacked and killed, viz., Want, Disease, Ignorance, Squalor, and Unemployment, there is also a sixth giant in India, viz. Dismissal or Victimization for Trade Union work, that has also to be tackled by legislation. Social security should, therefore, be planned and co-ordinated for the establishment of a real national minimum. A piece-meal programme of security is bound to defeat its own ends.

CHAPTER XVII

TRADE UNIONISM

Early Social Welfare Work among Labourers

Labour grievances were dealt with in the seventies and eighties of the last century by philanthropists and social workers. When the first Indian Factories Act was being enacted, it was they who in 1881 made a protest in Bombay on behalf of the workers against the inadequacy of that measure. The prime movers were Mr S. S. Bengalee and Mr N. M. Lokhande whose efforts were largely directed towards the amelioration of the conditions of women and children workers in the cotton mills of Bombay. In 1890 Mr Lokhande established the Bombay Millhands Association of which he became the Chairman, and which successfully intervened on behalf of the workers to obtain a weekly holiday for them. In Calcutta under the auspices of the Brahmo Samaj, the Working Men's Mission was established in 1878 which preached practical religion and morality, and established night schools for workmen and the depressed classes. Mr Sasipada Banerjee started in the eighties the Baranagar Institute, an association for promoting education and social welfare among the jute workers in the suburbs. By 1884 the Brahmo Samaj

at Baranagar under his leadership had established several night schools, and was doing temperance work among them. The jute mills at Baranagar took over the management of a night school and a savings bank for the benefit of the workers. More than a decade earlier the Brahmo preacher from Bengal Mr P. C. Majumdar during his missionary work in Bombay city established in 1872 eight night schools for the benefit of the working population in different quarters of the city.¹ The Workingmen's Institution, Calcutta, with which the present writer was intimately connected organized probably for the first time in India in 1905 an adult education movement for labourers in the slums of the city and its suburbs. As late as 1911 there was established in Bombay the Kamgar Hitavardhak Sabha, which by its name shows itself not as a labour union but as a welfare organization like the Calcutta institution but which used to make representations on behalf of workers of the city to the Government and intercede in industrial disputes. There were several associations of this kind in different parts of India which were more social service agencies than labour organizations.

Difficulties of Early Labour Unions

Since 1897 when the first labour organization—the Amalgamated Society of Railway Servants of India and Burma—was registered under the Indian Companies Act in India, many workers' organizations have sprung up in different parts of the country. But it took about three decades more for the enactment of law defining the rights and liabilities of trade unions. In the meantime there was no legal protection for the union men and officials. In 1918 a labour union was set up by Mr B. P. Wadia among the textile workers in the city of Madras. It was a remarkable success; it created great enthusiasm among the workers who joined in thousands. The present writer was just at this time in Madras and at the request of Mr Wadia went *incognito* among the workers of one mill who had been on strike to investigate their staying power and general economic condition. His report was that the women were rebellious as the children were starving, and

1. V. R. Shinde: "The Theistic Directory," pp. 16-18.

that the strike should be called off as quickly as possible. This labour Union, one of the most effective of early labour organizations in India, did excellent work in removing the grievances of the workers. In 1921 the employers used the law against this Union. In the course of a strike an interim injunction was obtained by them from the Madras High Court restraining the Union leaders from interfering with their business. This suit focussed attention on the need of trade union legislation that did not exist in India at that time.

In that year Mr N. M. Joshi introduced a trade union bill which, however, was not passed by the Legislature. For decades there was no legal recognition of labour organizations; only sacrificing labour leaders and philanthropic 'outsiders' carried on the struggle for workers' rights and even went to jail: the workers remained docile and unorganized—the remedy, they thought, lay not in concerted action which was too easily declared unlawful, but in migration from the factory, mine and plantation, or from industry generally to their agriculture and villages. Until recently, industrial disagreement has been a matter only for the police and the magistracy, who would, as soon as the employers feared some kind of concerted action among the workers, hound out the leaders or restrain 'agitators' from entering the industrial area. When a strike occurred it was more a question of law and order than of scrutiny of economic issues or labour relations. Thus the employers have often sought and obtained the assistance of local magistrates and police inspectors in breaking strikes by intimidating or confining the leaders and by a vigilant system of espionage of the activities of strikers and strike sympathizers.

Throughout the country, perhaps more in some provinces than in others, such attitude of the magistracy towards industrial disputes still persists. In most industrial centres it is the local police and magistrates from whom permission has to be obtained in advance for meetings and demonstrations—which may or may not be allowed and which in any case must wait for a week or so, no matter if an industrial dispute has cropped up suddenly, and the entire body of workers has to be informed and public opinion created about it without the

least delay. Trade unions are still too often looked upon with suspicion; and their officials, especially if they be outsiders, are regarded as 'mischief-mongers' who create labour troubles where none exist, and who thus defy the department in charge of law and order. The law in respect of the registration of trade unions now gives a legal status to unions and their activities. But registration of trade unions is not the same thing as their recognition by employers. Unions cannot be easily brought into existence when the police and the magistracy regard unionists as suspects and disturbers of peace. Their organization is still more difficult as long as employers are left free to recognize or reject, favour or discourage unions, through a policy of victimization and discrimination. In order that labour organization may be effectively and successfully set up in India, it is essential that employers be compelled to recognize unions and, further, in order that the rights of self-organization and collective bargaining of the workers be safeguarded, the employers' victimization and discrimination must be effectually prevented.

Obstacles to the Growth of Trade Unionism

The Indian Trade Unions Act was passed as late as the year 1926, giving registered trade unions legal status and their executive and members immunity from civil and criminal liability in respect of strikes; and the general funds of the registered union can now be spent for the conduct of trade disputes and the provision of educational, social, or religious benefits for its members. The number of registered trade unions in 1940 was 666, with a total membership of 511,138. All such unions cannot be regarded as stable or permanent associations. For many unions the membership is ill-defined and fluctuating. Many retain on their rolls names of members who have long ceased to pay subscriptions. Some of them are mere strike committees disappearing with the termination of industrial disputes. Very few undertake any social welfare programmes for the workers. And yet, there is no doubt that the working class in India is becoming gradually imbued with class-consciousness, which however has not been successfully canalized into the legitimate channels of collective bargaining and soli-

darity of the workers as in the West, where there is clear and ample recognition of the advantage of collective bargaining to industry. Collective agreements stabilize the level of wages in an industry and mitigate or abolish unhealthy competition between different units. Particularly is collective bargaining by industrial workers necessary in India where the regular exodus from villages to the industrial cities leads to constant encroachment on the workers' wages and standard of living. The majority of the Indian employers, however, find in the workers' organization nothing but a challenge to their power and authority, while the unscrupulous among them do not hesitate by any means fair or foul to nip in the bud growing cohesion among the workers. Unfortunately they do succeed too often owing to the characteristic social background of Indian labour. It is only in a few industrial centres that the labour force has attained some degree of permanence and regularity—which are indispensable conditions for the growth of collective readiness and enthusiasm to ameliorate its economic and social well-being. In the mines and plantations, in the seasonal factories, and even in the jute and cotton mills in many centres, industrial workers maintain their connexion with agriculture and the villages. The stronger this connexion the weaker is the cohesion among the workers, who, moreover, owing to their absence have often to change their establishments when they come back. The sardars and jobbers on whom they depend a great deal for employment are actively hostile to labour organization. Further, differences of caste, religion and language are disintegrating forces which are too often availed of by employers, following the familiar divide and rule policy. A few trade unions have been brought into existence on communal lines, especially among Muslim workers in the jute mill villages of Bengal and in Delhi and Lucknow. As a rule, however, both Hindu and Muslim workers have found that their economic interests are identical which may be served effectively by the Trade Union Movement without a split on religious or communal issues. The question of communal unions was considered by the Government of India in 1941 and again in 1943 and it was decided not to change the policy of non-recognition of communal unions. Where-

political and religious propaganda intervenes to divide the allegiance of workers to a labour union based on the unity of economic interests, the employers immediately take advantage of the separatist movement. A few of them also keep in their establishments spies and informers who sow seeds of suspicion and disunion among the workers, and also goondas or thugs—notorious agents for their systematic programme of intimidation, discrimination and victimization.

But the advantages which the employers obtain from such unfair practices are only temporary and precarious. For the proletariat consciousness that now sweeps through India touches even the workers isolated in distant jungles and hill-sides. And if there is repression of the workers' impulses and desires to unite and organize, the thwarted drives find outlets in lightning strikes, mob outbursts and sabotages. In such cases it is the employers who are more to blame for inhibiting a healthy normal growth of trade unionism.

Victimization and Establishment of Rival Unions

Complaints were made before the members of the Bihar Labour Enquiry Committee by accredited representatives of the labour organization that large-scale victimizations take place at Jamshedpur, where spies, goondas and strike-breakers ply their nefarious trade. Formation of rival trade unions has also been encouraged by the employers.¹ In an award of Dr. Rajendra Prasad and Pandit Jawaharlal Nehru who acted as arbitrators for some disputes they have observed that "Jamshedpur became notorious in past years for its goonda element, there were frequent clashes between sets of workers belonging to rival unions, meetings were broken up, violence and the throwing of stones were common occurrences. Under these circumstances no strong and disciplined trade unions could grow up and the interests of the workers were sacrificed by ambitious leaders. It was commonly thought that the company were not averse to these conflicts between rival unions and encouraged them in the hope that they would lead to the

1. See the Tata Workers' Union Memoranda, Memo. 2, Report of the Bihar Labour Enquiry Committee, Vol. III, Part C, p. 50.

2. Award, p. 4.

weakening of the labour movement. Some of the labour leaders and their henchmen were openly accused of receiving subsidies. . . . We are assured by their high officials, however, that for some years past they have had nothing to do with these methods and we see no reason to disbelieve them.'

In the industrial centres of Bengal, employers have systematically followed a policy of victimization, started rival unions, subsidized or bribed union officials and taken advantage of or actually fomented differences between Hindu and Muslim workers and their Unions or between Hindustani and Bengalee workers. There is systematic espionage through what is euphemistically called the 'Intelligence Department' and liaison officers who combine both welfare and information work for the management. Goondas are often employed to stablilise or intimidate honest leaders or genuine unionists. As many as half a dozen different unions could sometimes be found in a particular mill centre representing various communities and political parties, whom the employers know how best to divide through their policy of subsidy, neglect, non-recognition, or repression. For all this their readiest tool is, of course the sardar, who even yet largely controls the labour force in the jute mills, and is liable to summary dismissal if he loses his hold on the strikers. The policy of the Indian Jute Mills Association has been that of effective non-recognition of any kind of union or labour organization in the industry. In Cawnpore which has also been a frequent scene of long-drawn-out struggles between labour and management, evidence of victimization of workers by the employers has been often adduced. Here also the mill owners have tried to encourage the establishment of rival unions of the workers to disrupt the solidarity of the labour movement.

'Prohibition and Restraint of Meetings'

Other unfair methods are resorted to by the employers which contribute to prevent the growth of labour organizations. In many ores, mines and plantations in India the entire area belongs to the employers who are known to prohibit or restrain meetings of workers in their grounds and even to object to non men visiting the workers' quarters for collection of

subscriptions or for propaganda. The latter amounts to a denial of civil rights to workers. Indeed, the State should protect the rights of all workers to freedom of association by legislation permitting legitimate trade union activities to be carried on at or near the workingmen's quarters, regardless of ownership of place or quarters. The chief reasons why labour organization has not yet made any headway among the miners and plantation workers are their natural distance, and difficulty of access for the educated class artificially created by planters and colliery managers who sometimes shut in thousands of workers within their enclosures and sue for trespass any outsiders who happen to venture inside.

Complaints have been made before the Bombay Textile Labour Enquiry Committee that some employers in Bombay did not permit workers living in mill chawls to carry on any trade union activities in the chawls. This is, in the first place, a confusion between the rights of landlords who own the mill chawls and of employers under whom the tenants of the chawls work. Workers *qua* workers cannot be bound down by the laws and agreements of tenancy. Secondly, neither tenants nor workers should suffer any encroachment of their personal liberty, which includes their right to organize.

Prevalence of Victimization of Unionists

The protection by law of the workers' right to organize without intimidation and discrimination is the first necessary measure for the growth and success of the trade union movement in India. The experience of the Textile Labour Association, Ahmedabad, which is the strongest labour union in the country, is worthy of serious consideration by Indian legislators. In their Annual Report for 1936-7, they observe: 'The most powerful factor discouraging the spread of labour organization is the fear of victimization. It is no idle or imaginary fear. The Association has paid out Rs. 45,000 in the shape of "victimization benefit" during the last 10 years. Not a step can be taken in the direction of extending the union membership without provoking mass dismissals and large-scale victimizations.' The Association, it is added, has very limited resources for affording financial help to victims, and strike is not a fea-



sible course on all occasions. The Bombay Textile Labour Enquiry Committee's technical adviser, Mr. K. K. Desai, has observed: 'Even in Ahmedabad trade unionism had a chequered career during the last two decades of its existence and no employer, with the exception of one or two, in spite of existing arrangements has allowed a union to be formed without resistance, victimization and strikes.' In the U.P. a court of enquiry was appointed by the Government under the Trade Disputes Act to report on certain alleged cases of victimization by one of the cotton mills in Cawnpore. Just as victimization of workers by employers and the use of other methods that engender suspicion and fear in the workers and restrain them from joining or assisting labour organizations should be punishable by law, so bribery, corruption and favouritism by employers that encourage or discourage workers in participating in any labour organization should be regarded as an offence.

Necessary Measures to Prevent Victimization: American and Indian Models

The Bombay Industrial Disputes Act, 1938, already makes victimization of workers for being members of trade unions or for taking part in their activities an offence which is punishable with fine up to Rs. 1,000, the court being empowered to pay compensation out of the fine recovered. It will be on the whole preferable, for the object of safe-guarding fully the workers' right to organize, to incorporate into the Indian Trade Unions Act the relevant sections of the National Labour Relations Act, 1935, of the U.S.A.—which is regarded by labour in that country as its Magna Charta, and under which 'unfair labour practices' on the part of the employers became illegal for the first time. These sections are reproduced below:

Section 7—Employees shall have the right to self-organization, to form, join, or assist labour organizations, to bargain collectively through representatives of their own choosing, and to engage in concerted activities for the purpose of collective bargaining or other mutual aid or protection.

Section 8—It shall be an unfair labour practice for an employer—

- (i) To interfere with, restrain, or coerce employees in the

exercise of rights guaranteed in Section 7.

(ii) To dominate or interfere with the formation or administration of any labour organization or contribute financial or other support to it; provided that subject to rules and regulations made and published by the Board pursuant to Sec. 6 (a) an employer shall not be prohibited from permitting employees to confer with him during working hours without loss of time and pay.

(iii) By discrimination in regard to hire or tenure of employment or any term or condition of employment, encourage or discourage membership in any labour organization. Provided that, nothing in this Act, or in the National Industrial Recovery Act, (U.S.C. Supp. VII, title 15, Sections 701-712), as amended from time to time or in any code or agreement approved or prescribed thereunder, or in any other statute of the United States, shall preclude an employer from making an agreement with a labour organization (not established, maintained or assisted by any action defined in this Act as an unfair labour practice) to require as a condition of employment membership therein, if such labour organization is the representative of the employees as provided in Section 9 (a),¹ in the appropriate collective bargaining unit covered by such agreement when made.

(iv) To discharge or otherwise discriminate against an employee because he has filed charges or given testimony under this Act.

(v) To refuse to bargain collectively with the representatives of his employees, subject to the provision of Section 9 (a).

The Act creates a non-partisan board whose functions are two-fold:

(i) To aid in the free selection of employee representative agencies by holding elections or otherwise determining the choice of the majority of the workers within an appropriate bargaining unit;

(ii) To prevent unfair labour practices and to see that employers bargain 'in good faith', once the representative agency has been determined.

It is noteworthy that an Indian State, viz., Mysore has

1. For provisions of Section 9(a), see p. 336.

taken the lead in India in safe-guarding trade unionism. The Mysore Government sponsored and made into law the Mysore Labour Act in 1942 which

(a) recognizes the right of employees to combine into an association for the promotion of their common interests, provided that there shall be one association of employees;

(b) affords adequate protection to the workers against victimization by making it punishable with fine which may extend to Rs. 1,000 and directing payment of wages in case of wrongful dismissal, and compensation out of the fine recovered in case of wrongful reduction or other punishment;

(c) makes it compulsory for an industrial undertaking employing not less than 100 workers to furnish the Commissioner of Labour with a statement of standing orders regulating industrial relations; and also

(d) declares as illegal a strike or lock-out whose object is other than or in addition to the furtherance of an industrial dispute within the industrial undertaking.

Recently the criminal code in Canada has been amended so as to declare it to be an offence, subject to prescribed penalties, for any employer or his agent wrongfully and without lawful authority to refuse to employ or to dismiss from employment any person because of his membership in a lawful trade union or to use intimidation to prevent a workman from belonging to a trade union or to conspire with other employers to do either of such acts. On the other hand, the workers in the exercise of their right to organization should use neither coercion nor intimidation of any kind to influence any person to join their union.

The Magna Charta of American Labour

It will be useful in the interest of the labour movement in India to refer briefly to certain established principles and decisions and orders of the National Labour Relations Board which have contributed towards the strength of unionism and the prevention of anti-union discrimination and propaganda in the U.S.A. The employers in the U.S.A. are forbidden to make any kind of speeches or circulate pamphlets denouncing unionists and outsiders or 'professional labour leaders'; spying or

surveillance carried on by employers against union activities is also prohibited. Even offering advice to union men is forbidden, not to speak of propaganda which depends on psychological effects. Influencing of union action by bribing union officials is forbidden. The black-listing of unionists with other establishments is also condemned by the N.L.R.B. Every union official in this country knows how such 'interferences' by employers are hampering the labour organizations. The employers in the U.S.A. cannot encourage rival unions by financial help, favouritism or other aids. It is forbidden for an employer to initiate a company union either openly or secretly (in India company unions are frequently met with in the bigger establishments). If there be more than one legitimate union, the employers should deal with the union which is in the majority and cannot exercise any influence over the elections. Section 9 (a) of the National Labour Relations Act provides that the organization chosen by the majority is to be the exclusive representative of all the employees (though any group may present grievances). Contract with a minority union is 'unfair' if there is a majority union. If it be not clear whether a certain union commands the allegiance of the majority, the N.L.R.B. will hold a secret election and give the necessary certificate.

Victimization is strictly forbidden. The employer can no longer make non-membership in a union a condition of employment. Secondly, discharge of workers who are active in the union is forbidden. Where there is a suspicion of discrimination the employer is asked to substantiate his ostensible reasons for discharge. Thus the burden of proof is put on the employer. The fact that he is unfriendly to a union or that the proportion of union-men discharged is larger than that of non-union men is enough to get the Board's orders against him. The N.L.R.B. orders workers who have been discriminated against to be reinstated with back wages. A striker has the claim to be reinstated because he is an employee. The N.L.R.B. has passed orders directing employers to reinstate employees to their former positions, dismissing if necessary all those hired since the date of the strike or walk-out, and place all those for whom positions were not immediately available on a preferential list. The workers' right to be bargained with continues even while

they are out on strike. Both in the U.S.A. and Great Britain the convention of the closed shop has developed or is developing according to which the introduction of non-skilled or non-union labour or 'dilution' as it is called, is prevented by agreement between employer and unions. The N.L.R.B., U.S.A., which administers the National Labour Relations Act is made up of three members appointed for 5 years. It maintains 22 regional offices which prepare cases against the employers. Between 1926 and 1939 they handled 22,466 cases. They try to avoid formal trials; most cases are disposed of in informal conferences with regional directors. Behind the findings and principles established by the N.L.R.B. are the basic notions of the people of the United States of the desirability of collective bargaining and of a governmental agency to help struggling trade unions. Both the Board and the Act have contributed to reduce the number of strikes in the U.S.A. and to establish more harmonious relations between labour and management.

~~Compulsory Recognition of Trade Unions~~

In India we need a comprehensive Trade Unions Act, which will, in the first place, require compulsory recognition and negotiation, and, in the second place, forbid certain unfair practices which as in the U.S.A. and all other industrial countries, impede both the formation and proper and speedy development of labour unions. Recognition of trade unions in India should be made compulsory for employers on the fulfilment of the following conditions:

- (a) The union should be registered under the Indian Trade Unions Act and should continue to fulfil its requirements.
- (b) Membership of the Union should not be restricted on communal, religious, or political grounds.
- (c) At least two-thirds of the executive should be actual workers employed in the industry, and such executive should meet at least once in a quarter.
- (d) In the case of direct action there must be a ballot and the result of the ballot must show at least half of the members in favour of it.
- (e) A minimum subscription of a day's wage or Re. 1 in

the year, whichever is less, is collected from each member.

- (f) The union has been in existence for at least six months.
- (g) The union should have on its membership list at least 5 per cent of the employees.

The Question of 'Outsiders'

Compulsory recognition and negotiation carry with them certain responsibilities of the trade unions, which must be accepted in the interest of the proper development of unionism. The employer's objection to 'outsiders' is largely based on his expectation and experience that the executive formed from among the rank and file of the workers will be docile and accommodating. This if true would nullify the aims of the trade union which has to conduct negotiations with the employers with courage and determination, not only in times of peace but even during strikes and lock-outs. On the other hand, there is no gain-saying the fact that men have entered into the field of trade unionism in India who are indoctrinating the workers with ideas and beliefs that run counter to such fundamental institutions as property and the state. The workers are far too illiterate to understand the implications of communist ideology and on the whole flock to those who promise fulfilment of the largest economic and social hopes. It is for this reason that the workers should be trained to be as responsible and self-reliant as possible and to look at the particular issue in a factory or the industry as a whole more from the angle of present economic conditions and prospects of the workers than from a distant social and ethical ideal whether of Socialism or Communism or Fascism. Clauses (c) and (d) and (e) are safe-guards of the autonomy of primary labour organizations and of the workers' point of view. It is necessary for the successful running of the unions that the majority of the executive should have knowledge of the technical aspects of the industry. If the reduction of the outsider element from one half to one-third impoverishes the trade unions in this regard, each province should appoint a technical or economic adviser to the unions who when a dispute arises will help the union to present the workers' case before any tribunal or to bring about a settlement. A few years ago the Bombay Strike

Enquiry Committee stressed the need for the appointment of a technical adviser to the trade unions in Bombay which was regarded as essential for the proper framing of a scheme of standardization of wages. Without a responsible and at the same time efficient executive, trade unionism cannot grow. Efficient service for the unions can only be made available by adequate payment of their full-time officials. No longer can the labour movement depend on the voluntary services of lawyers, philanthropists, political and social workers, who are apt to build up half a dozen unions at different places, sacrificing intensity of work that alone can educate the workers to stand on their own legs. Like the cognate field of the co-operative movement in the Indian villages, the labour movement in our cities and towns calls for a devoted band of intellectuals who will have to live unknown among the working folk for a long time to organize them and to train them for constructive trade union work.

Instance of a Strong and Effective Trade Union

In spite of serious difficulties of organization, the fact that there are several efficient trade unions now running in the country augurs well for unionism in the future. The best instance of a compact, well-organized trade union is the Textile Labour Association, Ahmedabad, which was established in 1920 and has now a membership of about 33,000. This Association is a federation of several craft or occupation unions:

- (i) Weavers' Union
- (ii) Throstle Union
- (iii) Card Room, Blow Room and Frame Department Union
- (iv) Ward Union
- (v) Drivers', Oil-men's and Firemen's Union
- (vi) Jobbers' and Muccadams' Union.

The success of this Association was largely due to the solidarity it has been able to build up among the workers through its social welfare activities and through the practice of joint conciliation and arbitration with the Ahmedabad Mill-owners' Association which has kept the city relatively free from industrial disputes. Every big industrial city contains a large

body of the depressed classes. In Ahmedabad the thrattle room operatives drawn almost entirely from these castes have obtained educational, medical and other benefits and amenities from the labour union, costing in the aggregate about Rs. 70,000 annually, to a much larger extent than any other section of the workers. The Textile Labour Association which had an income of Rs. 62,224 paid about Rs. 43,000 by way of educational, social and religious benefits in 1939-40. It is from these castes that the lessons of solidarity first spread to other groups of workers. The ring spinning department in Ahmedabad, manned by the Harijans, has been almost completely unionized.

For social welfare work including compensation for accidents, medical aid, education, thrift and temperance work, this labour union spends annually much more than probably all the labour unions in India put together. For day and night schools for the workers alone the Association has spent about Rs. 6 lakhs. Nor is their daily routine of attending to and settling the workers' thousand complaints and grievances less significant. It will throw some interesting light on labour relations in India if we give an analysis of these complaints. Assault, ill-treatment, bribe-taking, refusal to engage, etc. which come under 'Treatment' represented the largest category of cases (876, out of the aggregate number of 3,794 complaints dealt with in 1936-1937). Next in numerical importance (705) came dismissals, fines, etc., which are included under 'Unjust Penalties'. Under-payment of wages, cutting down of wage-rates (contrary to the arbitrator's award), delay in the payment of maternity benefits, etc., which all come under 'Remuneration' represented 641 complaints. 228 complaints were connected with rationalization and reduction in the number of workers on other grounds. Successful conclusion was recorded in respect of 50 per cent of these cases; 9 per cent were settled by compromise. Hardly 10 per cent were 'entirely unsuccessful'. In the year 1938-1939, 3,984 complaints were brought to a conclusion, only 3 per cent being 'entirely unsuccessful'.

Need of the Union's Social Welfare Programmes

Ahmedabad, no doubt, shows the way towards building up a strong labour organization in India on the basis of wide-

ranging social welfare programmes, though a school of labour leaders looks askance at the latter as diverting organized labour from its proper economic aims. As a matter of fact even in Ahmedabad the Communists have obtained a footing and started their own independent Association, the Mill Kamdar Union, with a membership of about 2,800 workers. But solidarity grows and is not made, and especially in India, where caste, religion and social tradition cannot yet be obliterated by the leaven of proletariat consciousness, it is through a variety of welfare activities that mutual help and co-operation of workers can develop into the strongest bulwarks of the solidarity of labour. In welfare work employers or their money may be helpful, and this, according to the Communists, kills the courage and independence of labour organizations which have to fight the implacable resistance and victimization of the majority of the employers. There is, however, no doubt that a labour union strengthens its solidarity and capacity for collective bargaining and strike by its ameliorative and constructive activities. On the other hand, without adequate solidarity and staying power the use of the strike weapon does more harm than good to the rank and file of the workers. Most trade unions in India due to paucity of funds are, so to speak, strike committees, the workers' interest in which wanes as soon as the period of storm and stress is over. Or the unions' limited funds are completely used up during a strike. Thus the labour organization is caught in a vicious circle. Poverty of resources does not permit facilities of education, medical aid, unemployment and other benefits being given, and thus the workers who cannot all the time be fed with slogans and shibboleths fall off in membership. Employers, on the other hand, gauge the strength of the union from its membership and refuse to negotiate with the leaders where the union is weak. Thus strikes follow and cannot succeed because of the want of staying power of the union. Adult education, thrift, co-operative credit, the running of co-operative stores, reading rooms and dispensaries and the provision of unemployment, sickness, and death benefits are some of the directions in which the activities of trade unions should be directed for the strengthening of the labour movement and the development of leadership.

from within the rank of the workers. Several trade unions in India are devoting themselves to some of these constructive programmes. Not before the rank and file of the workers are lifted from their present ignorance, prejudice and narrow social outlook can a genuine labour movement develop in the country.

National Federations of Unions

Some of the strongest unions in India are those of Railwaysmen, Post and Telegraph workers and printers, who are all fairly educated, who produce their own leaders to guide union activities with tact and ability, and who have also formed themselves into large federations. The most important national federations of trade unions in India are the All India Railwaymen's Federation, with 15 affiliated unions and a total membership of 129,074; and the All-India Postal and Railway Mail Service Conference, with 11 affiliated provincial unions. In India we have hardly any federations for such big industries as textile, engineering, mining and plantation. As long as a national federation of trade unions in a particular field of industry cannot be successfully organized, various common problems such as minimum wage, working conditions, hours of labour and unemployment benefits cannot be tackled on an all-India basis.

The organization which can most effectively do this is of course the All-India Trade Union Congress, which after a split at Nagpur in 1929 has achieved unity through the amalgamation of the National Trade Union Federation and the All-India Trade Union Congress. This is now a body in which different groups with contrasted ideologies are endeavouring to obtain control of the executive and of the general policy. From the point of view of the formation and successful working of the primary labour unions in this country, it is essential that the different groups of labour leaders should enter into a truce according to which they should not, as far as practicable, compete with one another in setting up multiple unions among the same body of workers, or dislocate the work of existing unions by hostile propaganda and by lightning strikes which are caused merely for the purpose of fomenting unrest and

are bound to fail because of lack of preparation—leading to the loss of morale of the entire body of workers. A heartening example of such closing of the ranks is afforded by the merger of the G.I.P. Railway Workers' Union and the New G.I.P. Railway Staff Union, run by rival schools, into one common organization, called the G.I.P. Railwaymen's Union. But in Cawnpore, Kolar and other centres rival labour groups fight bitterly to the dismay and disorganization of the workers. The workers are divided a great deal already through the propaganda of the employers, through communal representation and through differences of language and caste. If the ignorant workers are divided afresh into rival groups owing to the difference of ideologies of the labour leaders, their solidarity will be seriously undermined and the labour movement will receive a setback. In several centres of India labour unions cannot be formed or existing unions are disintegrated through the formation of rival unions by different wings of the labour movement competing with one another for obtaining the allegiance of the workers in the same industrial centre. The establishment of a socialistic state in India may be the objective of the All-India Trade Union Congress. But a workers' Raj is built up from the bottom on the basis of the autonomy and self-government of groups of workers. Leaders are few and they should not dissipate their energies by setting up rival unions or contesting elections to the executive of the same trade union on grounds of ideological disparity which are far too remote for workers that are denied subsistence wages and the ordinary amenities of life. The vast body of Indian workers yet remains unorganized. Organization will be surer by shifting the emphasis from shades of political opinion that divide the various wings of the labour movement to the concrete issues and grievances in a given industrial undertaking in a matter-of-fact, practical manner, free from dogma and doctrine.

CHAPTER XVIII

INDUSTRIAL PEACE

General Causes of Strikes

The development of capitalistic industry which means the control of the tools of production by a small *entrepreneur* class has brought to the fore the acute problem of friction between management and labour throughout the world. Industrial disagreement, strike and lock-out have, therefore, been evident wherever industrialization has spread. Such conflict arises from cases of dismissal of individual workers or retrenchment of groups of workers or from broad questions of hours of work, wages, bonus, leave and other conditions of employment and, indeed, whenever any grievance gathers enough strength and unanimity to become a collectively felt need of the workers. In periods of quick economic change associated with either depression, rationalization and unemployment, or rise in the general cost of living, disagreement is more wide-spread and acute, and strikes become far more frequent.

In India all these causes have been operative. Low wages or wage cuts, intolerable conditions of work, undeserved punishments, or mass discharges provoke strikes. Assaults, abuses and misbehaviours also lead to strikes, though it is not unusual for the workers to fall back on a petty quarrel and humiliation as an excuse for respite from an unbearable situation. In the latter case the background of working conditions is far more important than the immediate incident. The Trade Union is relatively new and as yet undeveloped in this country. In many cases the strike weapon is used by workers even though there is no trade union and therefore no guidance and control of a trade union executive—even the formation of the trade union itself provokes intimidation and victimization on a large scale from the management. Workers want to exercise their freedom of association, and secure the rights of collective bargaining. But the agents whom they

elect to choose are dubbed 'outsiders' or a third party who cannot be 'touched with a pair of tongs' and are treated with indifference and scorn, even deliberately insulted. Not a post card is sent in reply to respectful statements of demands and grievances. It is the managements' deliberate policy of non-recognition of unions and persistent refusal to deal with the accredited representatives of the unions that is one of the most frequent causes of strikes in India. Indeed, a labour union hardly ever gets recognition without the ordeal of a strike and no sooner the union becomes weaker owing to a variety of circumstances than the recognition is withdrawn. Even with due recognition on paper the employer often ignores the union and its representation of the workers' grievances. Railways and other big industrial establishments have followed a curious policy of recognition and non-recognition according to the waxing and waning of membership and power of their respective labour unions, of course all the while endeavouring to effect a breach in the ranks of labour by ingenious and unfair practices. A typical instance of a big general strike lasting for a considerable period is afforded by the strike in Cawnpore in 1937, directed against the non-recognition of the labour union—the Mazdur Sabha—by the employers.

Important Strikes and their Consequences

Strikes were not usual in the nineteenth century in India, though some took place in the early eighties attended with suffering and bitterness. But on the whole strikes manifested themselves in the form of abandonment of the industrial undertaking by individual workers or groups of workers. There was no endeavour to obtain redress of grievances through concerted action. Strikes became frequent and attracted the interest of publicists, not belonging to the working classes, since the end of the First World War. That war brought considerable profits to many industries in India. There was some increase in wages, but prices rose more sharply than ever before. Thus there was great distress among the workers, which provoked a series of strikes in 1918 and 1919 in different parts of India. These strikes usually resulted

in the concession of higher wages and the amelioration of working conditions, which industry could easily afford but which were so long withheld. At this time industry was thriving and was demanding more and more workers, but the influenza epidemic that took a heavy toll of human lives in India contributed towards shortage of labour in the more important industrial centres of India. It was also at these centres that labour organizations had by that time taken firm roots. The initial successes of some of the strikes not only promoted solidarity among the workers, who came to regard the strike as an unfailing weapon, but also drew leaders and organizers from among the intelligentsia into the labour movement. The aftermath of the war and the Russian revolution aroused mass consciousness throughout the world, and the press in Indian languages carried the gospel of freedom and power of workers and peasants to the Indian Have-nots. The Non-co-operation Movement educated the masses far and wide in India in 1919-1921 and the gulf between the intellectual and the working classes was largely abridged as a result of political and economic propaganda which merged in each other among the workers. It must be said that the amendment of the Indian Factories Act in respect of the 60 hours' week was largely the result of the strikes of 1919-1920, several of which demanded a 10 hour day. Among the bigger strikes of this period was the Assam Tea Garden strike in 1921, which led to a wholesale withdrawal and mass migration of garden coolies from certain areas in Assam. This was followed by an attack of the Gurkhas on peaceful and destitute coolies at the Chandpur railway station, causing sudden and immediate sympathetic strikes on the Assam Bengal Railway and on the river steamers. For about three months there was complete dislocation in the railways. So far as the garden coolies were concerned the strike was an egregious failure and inflicted great hardships on them—a glaring instance of the result of mere propaganda among the workers without its being backed up by organizational effort. In 1924 there was a general strike in Bombay city which was bigger in proportion than any previous strike in India, involving about 160,000 workers. This was directed against the withholding of the bonus which

the textile operatives were obtaining for five years and which was regarded by them as part of their wages. It was followed up the next year by another general strike in Bombay city, which was even more serious than the former, and involved a loss of nearly 11 million working days. This strike was a great success, since it obtained for the workers the restoration of the cut in their wages. In 1928 and 1929 big general strikes occurred again in Bombay city and island involving more than 100,000 men on each occasion. The first strike was directed against intensification and the second against acts of victimization on the part of the employers against workers connected with the industrial disputes of the preceding year. The latter strike is of interest for two reasons. First, it was in this strike that the Communist group among the Indian labour leaders first made their influence strongly felt among the Indian workers, who began to get acquainted with communist ideology—though a few years earlier certain communists had been active in Cawnpore as trade union workers and were arrested and imprisoned in 1924. Secondly, this strike paved the way to enactment of the Trade Disputes Act, 1929, and the machinery provided by this Act was actually used for the first time in connexion with its settlement. This strike lasted for six to seven months and workers in all the cotton mills of the city had participated. A similar general strike occurred in 1929 in the Bengal Jute Mills, which affected 272,000 jute mill operatives in the Hooghly riverain and which was directed against the employers' decision to increase the working hours from 55 to 60 per week. It lasted eleven weeks and was settled by direct negotiations between the employers and the workers, in which the majority of the latter's demands were conceded. In 1938 there was again a general strike in the jute mills—the greatest in magnitude in Bengal, involving 291,800 workers, and a loss of wages to the extent of Rs. 35½ lakhs. The workers demanded restoration of the cut in wages effected in 1932. In the same year there was a general strike in the Cawnpore mills when about 50,000 workers struck work as a protest against the rejection by the Employers' Association, of the recommendations of the Enquiry Committee appointed by the U.P. Government. A re-

TABLE CV

Classification of Industrial Disputes by Industries, 1921-41¹.

Industries	No. of Dis- putes	No. of workers involved	Days lost	Demands			Results			
				Wages and bonus matters	Employ- ment and discharge of workers	Leave and hours	Other matters	Successful	Partially Successful	Un- successful
Cotton, silk and woollen mills	1,943	2,932,595	83,614,068	1,079	476	60	333	375	352	1,186
Jute mills	513	2,077,826	21,429,962	232	127	51	103	36	81	383
Engineering workshops	247	191,027	5,777,539	137	54	14	42	26	69	142
Railways includ- ing Railway workshops	125	396,747	9,761,188	54	35	8	28	10	28	85
Mines	82	100,561	1,660,038	57	7	4	14	10	22	46
Miscellaneous	1,749	975,402	12,957,526	1,105	242	61	341	335	536	840
Total	4,664 ²	6,674,158,135,200,321	2,664	941	198	861	792	1,088	2,682	

(1) Compiled from Industrial Disputes in India, Bulletins Nos. 43 and 62 published by the Labour Department, Government of India. Recent figures have also been supplied by the Labour Department, Government of India, New Delhi.

(2) 95 industrial disputes have in all been carried over from year to year since these did not terminate in the years of origin,

prehensible feature of the situation in Cawpore was that the employers refused even to accept intervention or mediation by Government and also declared that they would participate in conciliation proceedings only if the workers were to seek redress of their grievances individually, and not through their labour union. Although general strikes lead to great loss of profits, wages and working days, strikes in certain establishments, such as iron and steel works and mines lead to the damage of costly mechanized plants as well. Thus a strike directed against retrenchment at Jamshedpur in 1928, which was only less important than the general strikes in the Bombay cotton and Bengal jute mills lasted for 105 days, causing a net loss of Rs. 25 lakhs in wages to the 26,000 workers involved. The loss to the employers was estimated at Rs. 22 lakhs. The loss in working days amounted to nearly two and a half million. In the final settlement, the workers obtained certain substantial concessions but had to yield on the question of retrenchment.

TABLE CV gives a classification of disputes according to industries and number of men involved between 1921 and 1941.

The proportion of failures is on the whole largest in the mines where trade unions are least developed and smallest in the textile and engineering industries where there is a strong trade union organization under an effective leadership, especially in the Bombay Presidency. Here the number of disputes which take a serious turn is the largest. With provincial autonomy more strikes have succeeded than in the past owing to the sympathetic attitude of the Congress Ministries in eight Provinces. It is also noteworthy that the number of disputes in proportion to the number of workers is the smallest in the mines because of the lack of trade unions, and the largest in the railways and engineering workshops owing to the strength of the trade union organization. In the railways many industrial disputes are besides nipped in the bud. Thus a relatively smaller proportion of industrial disputes accompanies a fair proportion of success. But a most interesting side-light is thrown on industrial relations in general by a comparison of the number of industrial disputes in Ahmeda-

bad and Bombay city. As is well known, the Textile Labour Association in Ahmedabad is probably the only big and effective trade union in the whole country which plays its due role in collective bargaining for the workers. Now a comparison of the number of strikes between 1928 and 1940 shows that while in Ahmedabad the number was only 249 involving only 180,694 workers the number of strikes in Bombay was 343 involving 961,820 workers. The loss of wages in Ahmedabad was only about 1.5 per cent of that in Bombay.¹ Nothing testifies more clearly to the necessity of organized unionism for industrial peace in the country.

Machinery of Industrial Conciliation: (A) The Works Committee

It is unfortunate that though we have borrowed Western industrial methods and organization, the machinery devised in the West that ensures harmonious industrial relations, or at least mitigates violent industrial disputes, has not been set up in this country. The result is that strikes have become common, causing a serious economic injury to employers and workers alike—and often grave inconvenience to the public. Taking into account the net results of all strikes and lock-outs that occurred during the last two decades—the privations of the workers, the diminution of output and profits for industries, the inconvenience to the general public and the attitude of mutual distrust and suspicion between workers and employers they leave behind—the consideration of methods for prevention of disputes, and of their settlement when they do arise, must be deemed urgent. The situation has been one of continuous trial of strength and uncertainty, and the remedies suggested must be such as will go to the root of the problem.

It may be pointed out at the outset that the most effective agency for the settlement of disputes is one formed within an industrial establishment or its different units. An external agency cannot have an intimate knowledge of the basic conditions, and cannot function all the while. Conciliation is not only different from a truce; it is also a continuous task and discipline, requiring constant give-and-take between labour and management. Thus the most practical need is

1. S. C. Gupta: Unpublished MS on the Industrial Disputes of India.

for an internal machinery in which the representatives of the labour union and the management can meet more or less in an informal manner and nip grievances in the bud—before they assume larger proportions by being fed by the attitude of the large majority of the workers.

The management should request the Labour Union to form these Works Committees in different shops or departments from its representatives employed in each shop, with whom will be associated such representatives of the management as Superintendents, Foremen, etc. It is only in big industrial establishments that such Works Committees will be constituted for the different shops or departments, smaller establishments having a single Works Committee. All questions of discipline, grade, wages and conditions of work, about which misunderstanding or disagreement arises, should first be threshed out in the Works Committees. As the labour-members of the Works Committees are expected to be active members of the Labour Union this will assure the Union's support and sanction in case the misunderstanding grows into a dispute at a later stage, while the presence of the Superintendent, Foreman or Maistri will ensure a realistic appreciation of and a spirit of compromise over the issue in question on the part of the management, right from the very beginning.

But collaboration in an atmosphere of goodwill is possible only when the Works Committee works in harmony with the general policy of the Labour Union; when the Union on its part does not unduly fetter the discretion of its own representatives in the Works Committee over matters that are often the representatives' primary concern; and the management also treats the Union representatives with due consideration and does not attempt to undermine the influence and solidarity of the Union through them.

The Works Committee should not, however, be a statutory body. A statutory body created for smoothing industrial relations and yet unable to create confidence among the workers may even worsen the situation by creating bitterness. For in actual practice there may be an attempt on the part of the management to use it as a rival of the trade union that has already been established, or to forestall and prevent its

formation. On the other hand, with a spirit of give-and-take between the management and labour, the Works Committee should be useful, especially in large industrial undertakings, as an effective machinery to bring workers' and employers' representatives face-to-face for removing misunderstanding and settling disagreement at a stage when it ought to be easy to do so. But questions of a general nature, such as wages and working conditions, employment and discharge, which are far different from the details of day-to-day management cannot from their very nature be successfully dealt with by the Works Committee.

Machinery of Industrial Conciliation: (B) *The Trade Union*

Thus on the whole we have to look to the Trade Union, maintaining constant contact and collectively negotiating with the management, as the most obvious and effective machinery for the settlement of industrial disputes. But a liaison has to be supplied by governmental administrative machinery. The Government in each Province should therefore have a Labour Commissioner, with the Labour Office and a Wages Board under him. Every change in the conditions of employment in each important industrial centre, interpreted in the broad sense of the expression, should be notified to the Labour Office. If the Labour Commissioner anticipates any trouble he will discuss the matter with the management and the Labour Union, and try to clarify and resolve the issue for the maintenance of a peaceful atmosphere. To the Labour Commissioner will be brought all grievances and disputes between the workers and the employers, which will thus be disposed of without delay, expense and bitterness inevitable in regular court proceedings. The Labour Commissioner will also frame standard standing orders in consultation with the employers and trade unions in respect of work and payment, dismissal and promotion, retrenchment and employment—that will contribute to minimize causes of friction. The Labour Commissioner in the U.P. has his headquarters at Cawnpore and tries to settle all disputes referred to him by amicable arrangement between the Mazdur Sabha and the Employers' Association. In Bombay a similar procedure has been adopted.

ed, the Labour officer representing the grievances of the workers, especially those who are not unionized, and getting them redressed by periodically visiting principal centres of the Presidency. The Wages Board, by seeing to the working of minimum wage legislation, and by dealing with such problems as standardization of wages, intensification, movement of the cost of living, increment and promotion, will also eliminate many possible causes of disagreement. Especially are such Wage Boards necessary during the war-time when the cost of living has risen considerably. In Great Britain prior to the beginning of World War II there were four Trade Boards which were established in fifteen years. Since the war there has been great increase of Trade Boards activity and two new Boards have been inaugurated. In India for the preservation of industrial peace Wage Boards should be set up in the major industrial centres for safe-guarding the workers' standard of living and adjusting the wage level to the rise in the cost of living.

Notice of Strike and Conciliation

If for certain circumstances the disagreement cannot be removed at the preliminary stages through discussions in the Works Committee and the Labour Union, or through the intervention of the Wage Board and the Labour Commissioner, and the situation develops into the prelude of a strike, it is necessary, in the first place, that there should be notice given for a strike, which should not be less than a week's time. For the public utility services such as supply of power, light and water, and for key-men in the essential parts of a plant or establishment, the notice of a fortnight should be deemed necessary. This period can be informally utilized by both the parties for coming to an understanding without a trial of strength. But formally it will be during this week that conciliation will be attempted. Immediately a strike notice is tendered, the Government should require the Labour Commissioner to enter into the specific matters which are the subject of disagreement and appoint a Board of Conciliation. The Labour Commissioner will be the ex-officio officer and preside over this Board, which would consist of two other

members representing labour and the management respectively, with some technical assessors who will be co-opted if necessary. It will be the task of the Board to enquire into the dispute and arrive at an agreed settlement. During its enquiry it will hear evidence in public so that the community may be enlightened in respect of the situation, but *in camera* evidence will also be permissible. The enquiry should not exceed one week except with the consent of both the parties. During the process of conciliation any strike or lock-out or recruitment of labour with a view to replacement or disturbance of the *status quo* will be illegal. But each party will be free to act as it chooses after the Board of Conciliation announces its decision.

The Conduct of a Strike

It will be pertinent to consider briefly here the conduct of a strike. We have seen that no strike should be deemed legal unless it is preceded by a week's notice, and also during the period of conciliation proceedings. When a strike commences it is necessary to define precisely the limits of legitimate activity of both labour and the management. In the past, the absence of fairplay on both sides has often been a sore point and has left behind bitterness and exasperation, aggravating the evils of a legitimate conflict. On the one hand, labour unions furnish reliable evidence to the effect that spies of employers shadow union men and act as *agents provocateurs*; goondas or strike-breakers are employed to belabour and terrorize workers loyal to trade unions; houses are broken into or torn down and women and children of workers living in the employers' quarters expelled immediately; essential services like those of lighting, water supply and scavengers are cut off; meetings of workers are broken up or sought to be prevented; fresh enclosures are erected rendering it impossible to hold meetings at suitable places or places previously used for the purpose. On the other hand, the management has to encounter abuse, intimidation and molestation of loyal workers and even sabotage and wilful damage to property.

Definition of Peaceful Picketing

In order to ensure fair practice on both sides it is essential that the legitimate limits of activities of the respective parties should be recognized and respected, and as far as possible, legally defined. The workers' want of staying power calls for active organization and propaganda during the strike period for eliciting public sympathy and support. Freedom of association must be ensured, and no hindrance should be offered to meetings, demonstrations or house to house visits. Peaceful picketing is also a legitimate part of the workers' activity during this period so long as it does not result in intimidation, obstruction, or violence. According to the Chief Secretary of the Government of Bihar who was examined on the issue of governmental intervention during strikes by the Bihar Labour Enquiry Committee, it is with reference to these three features, viz., intimidation, obstruction, and violence, that picketing is to be judged as to whether it is peaceful or not. He observed: 'There is no definition in the Indian Penal Code of peaceful picketing but there is an offence of molestation under the Criminal Law Amendment Act which includes these criteria', and he agreed with the present writer during cross examination on this moot point that there ought to be a working definition of peaceful picketing to give guidance, and it should be made as complete as possible. It will, indeed, help towards discrimination by the magistracy between legitimate and illegitimate activities of strikers, if we adopt the definition of peaceful picketing as given in the British Trades Disputes Act of 1926-7.

Other Safe-guards of the Workers' Rights

On the other hand, it will also be essential to punish spying and strike-breaking as criminal offences of employers. Like the big steel plants in the U.S.A., big metal works in India are alleged to employ labour spies and professional strike-breakers, some of whom have criminal records, as a regular tactic in their war on unionism. Such strategy combined with the black list and the lock-out, it has been pointed out, has been imported from the U.S.A. by some of the Shop Superintendents who got their training in steel establishments

of that country. Legislation is required forbidding spying, the use of the employers' watch and ward outside their establishments and the employment of strike-breakers, who may be defined as persons employed during the strike at more than current wage rates. In the U.S.A. the Byrnes Law passed by the Congress in 1936 forbids bringing a person across a State line with intent to employ such person to obstruct, or interfere, in any manner, with the right of peaceful picketing or of 'organization'. No cause for trespass should arise against a striker or member of the Union so long as his approach to the machinery is not near enough for an apprehension of sabotage. On the other hand, 'sit-down' strikes should be declared illegal as in Pennsylvania and Minnesota in the U.S.A., fraught as these are with risk to the plant and to the workers. In a 'sit-down' strike at the Monghyr Tobacco factory sweet reasonableness prevailed both among the workers and the management. There was no pilfering of tobacco or cigarettes nor sabotage, while the management gave every facility to the strikers to obtain their food inside the factory premises. Such amity in the midst of an industrial dispute cannot, however, be always expected. On the employers' side, no employer should be permitted to interfere with or discontinue such essential services as the supply of water and light, sewage disposal, etc. in the workers' quarters. In fact, in these matters the reciprocal relations partake of an essentially different character—that of the municipality or the landlord to the citizen or the tenant. Again, unless the quarters are required for objects other than tenancy no worker who has not been formally discharged should be ejected. A striker does not cease to be an employee merely because he exercises the right to strike. In the case of discharged hands, however, the management should have the full right to resume possession of the quarters after two months' notice.

In the coal-fields of Bihar and Jamshedpur employers have sought during strikes to evict workers from the dwellings provided by them, and even to withhold lighting and water supply. In the jute mills of Bengal, employers have repeatedly during occasions of strikes ejected the workers forcibly

from the cooly lines. Even there is an instance of a Railway establishment forcing the workers during a big strike to vacate quarters owned by the Railway. In Bombay, Cawnpore, Dehri-on-Sone, and other centres as well, workers have been called upon either to resume work or vacate the houses owned by employers. The right to organize meetings in the compounds of chawls in Bombay has also been denied and trade union organizers and other public workers are occasionally refused access to the workmen's quarters owned by employers. Wherever employers have provided housing for the workers in India they have tacitly assumed their right to permit or deny access to the quarters to anybody as they choose, and to prohibit any meetings or gatherings. In both plantations and coal-fields an entire locality belongs to employers who have often disallowed the entry of trade union workers and even sued them for trespass. The present writer was himself accused of trespass while presiding over a labour meeting in the colliery area in Bihar when there was no strike in view. In one of the tea gardens in Alipore Dooars he was prohibited from establishing any contacts with the coolies in their hutting. A recent High Court judgment in Bombay holds that so long as the workmen pay rents, they have the right to the unfettered use of the premises let to them, subject to the exercise of this use not being prejudicial to the tenants' relations with their neighbours and to there being no annoyance caused to the public. What rights are accorded to tenants by law cannot be denied to workmen staying in tenements owned by the employers.¹ During the period of war employers here and there in different industrial centres have also tacitly assumed their right to withhold rations from the workers on strike. When there are no shops where they can buy the necessaries of life, such a drastic measure is enough to bring the workers to submission without even a preliminary discussion of their grievances.

The procedure of compulsory conciliation we have laid down restricts the right of the workers to strike in the interests of industry and of the public. Not merely should there

1. Report of the Textile Labour Enquiry Committee, Vol. II, Final Report, pp. 276-7.

be notice of a strike for the period of a fortnight but the workers must accept compulsory conciliation and no strike should be permitted until the expiry of the subsequent fortnight when the conciliation proceedings are in progress. When a union or a body of workers presents the issue of an industrial disagreement to a Board of Conciliation, it invites the judgment of the public on that issue. The public, like the other two partners in an industry, viz. the employers and the workers, must have a say in the matter, although its opinion as expressed through the Board of Conciliation is a recommendation and is not binding. With this appeal to public opinion in view, the workers deny themselves the right of immediate suspension of work on what they may consider to be a legitimate issue for the time being. If for any reasons, the workers or the employers are unable to accept the recommendations of the Board of Conciliation and there ensues a trial of strength, it must be recognized that the strikers during the period of struggle have neither lost the status of workers nor the right to resume work after settlement. On a general resumption of work after a strike, no worker should be discriminated against unless his activities during the strike were found to have transgressed the limits of law. The N.L.R.B. in the U.S.A. would not order a worker to be re-instated who is convicted of a felony, and yet point out that 'the strikers' behaviour is up to the police'. In the period of the strike workers who do not join the strike or wish to resume work earlier than others are entitled to full protection against molestation or intimidation by strikers. But the case of the recruitment of fresh labour stands on a different footing. The workers being economically the weaker party, the postponement of a strike usually reduces their capacity to hold out, while to the employers it gives opportunities for consolidation of their resources. The appeal of the workers to the force of public opinion, in the first instance, must not be permitted to develop a situation in which the employers definitely have an advantage over the workers simply because of the mere lapse of time. Obviously the right of the employers to recruit new labour during a strike places the workers in a much more disadvantageous position than when they were

placed before or during conciliation. Time is an ally of the stronger party and an enemy of the weaker, especially where large masses of ignorant ill-organized workers are involved.

With the adoption of compulsory conciliation the recruitment of fresh labour accordingly becomes incompatible with the workers' right to strike. Strikers, merely because they have gone on strike, cannot be regarded as having been discharged or dismissed. On the other hand, that every striker goes back to his job is the *sine qua non* of a reasonable settlement. Discrimination against a worker or a group of workers would amount to victimization—which is proposed to be prohibited by law. Yet such discrimination becomes inevitable if the employers recruit fresh hands. Against the camaraderie of the workers who do not wish to see any of their fellows left behind jobless, is pitted the employer's keenness to retain the services of men who have helped him in need, and this becomes a serious obstacle to the settlement of a strike.

In the practical situation which arises in the course of a prolonged strike, we cannot ignore three hard facts. First it is almost impossible to resume normal productive operations without the return of a considerable section of the permanent labour force. Secondly, the new recruits become helpful to the employer not merely as workers but also as agents for bringing about demoralization in the camp of the strikers sought to be frightened into submission. Thirdly, such recruitment often merely prolongs a strike with increase of economic loss to the employers and of privations to the workers. It thus leaves a legacy of bitterness among the workers and obduracy among the employers that make mutual approach more and more difficult. Above all, in the larger interest of industrial peace any recruitment of fresh hands during a strike should not be permitted. The various incidents with which such recruitment on a large scale gets invariably associated make it full of risks to public tranquillity. Among ignorant but organized workers faced with the attack on their livelihood both social boycott and peaceful picketing might now overstep their limits. The employers would forestall or retaliate this by bringing in the aid of strike-breakers, the employment of which is regarded as a felony in the U.S.A.,

but is not an offence in India though it involves a serious menace to peace and order. Such circumstances impelled the Government of Madras on a recent occasion to resort to section 144 of Cr.P.C. prohibiting the employers from recruiting fresh labour when a strike is in progress. Many strike-breakers are indeed recruited from the new hands whose activities not only provoke violence during the strike period but poison industrial relations, being regarded with suspicion and hostility by the bulk of the workers ever afterwards. Strike, recruitment during strike and violence usually form a vicious circle which can be broken effectively only by a simultaneous regulation of both strike and recruitment. The N.L.R.B., in the U.S.A., has given the ruling that if a strike be unsuccessful and if some of the employees ask to get their jobs back and be refused under circumstances that point to an anti-union motive of the employer, the employer shall reinstate them to their proper positions, dismissing if necessary all those recruited since the date of the strike. Reinstatement has been upheld by the Supreme Court in the U.S.A. It is upheld even if the workers neglect to apply to the employer.¹

Safe-guards for the Operation of Essential Processes of Plants and Utility Services

Finally during the conduct of a strike the activity of the strikers must be compatible with certain essential safe-guards that should be secured to the employer. What these safe-guards are has been described before the Bihar Labour Enquiry Committee as follows: Apart from safe-guards for the public utility concerns, the principal safe-guards required are protection against sabotage and any kind of wilful damage to property. In any large, highly mechanized plant, there are also certain essential processes which must be carried on whether there is work or not, as a complete and sudden stoppage of such essential processes would lead to damage to the plant so extensive that it would take a considerable outlay and period of time to repair. Even after the strike is terminated there will, therefore, be no work for the men owing to

1. N.L.R.B., Second Annual Report, 1936-7, p. 153.

the plant being seriously impaired. Where the workmen are more educated, these facts are clearly understood and arrangements are made by the men themselves to keep such essential parts of the plant going; e.g., in the event of a strike in a coal mine, arrangements are always made to see that pumps are kept working. If owing to the ignorance of the workmen the necessary body of men are prevented from operating such essential parts of the plant in a mine or a steel works, it will result in the destruction of the means of livelihood of the men themselves. Many establishments also supply power, lighting and the necessary municipal services to the industrial town or locality. Such services should be allowed to function without interference or intimidation.¹

By arrangement with the Labour Union during a strike the key and essential processes and services should be undertaken by men sent by the Union, so that there might be neither damage to plants nor interruption of lighting, water supply and sanitary services in the industrial centre. In strikes in coal-fields in India the convention has developed for the safety-work being carried on as usual during a strike. This convention ought to be developed so as to cover the essential processes in every industry. Like the pumpmen in mines or the key-men in the blast furnaces, ovens and essential electrical plants in the metallurgical establishments, workers in the safety and fire prevention services in the textile mills should continue to work during a strike.

Scrupulous Neutrality of the Police and the Magistracy

Government through the police and the magistracy cannot always maintain a strictly impartial attitude during a strike or lock-out. Complaints are not infrequent of the undue censorship of strike news, interference with peaceful picketing, arrest and removal of admittedly non-violent labour leaders, prohibition of meetings and demonstrations, and even of the belabouring of strikers by the police. The President of a labour union in Bihar tendering his evidence before the Bihar Labour Enquiry Committee related that the police station in

1. Report of the Bihar Labour Enquiry Committee, Vol. III, Part B., pp. 18-19.

the particular industrial centre has been systematically used as the import depot of 'black-leg' labour and the policemen utilized for its recruitment. Evidence comes from most industrial centres in the country that the magistracy and the police in any particular strike are apt to favour the employers at the cost of peaceful strikers. During industrial disputes the police and the magistracy hardly show a fair and scrupulous neutrality. The application of Section 144 of Cr.P.C. itself prevents contact between labour leaders and the rank and file of the workers and thus indirectly may lead to mob violence when the restraining influence of leaders is withdrawn. On the other hand, the police have been sometimes utilized, not merely to protect and escort black-leg labour to the factory premises, but also to belabour peaceful strikers who remain loyal to the union and do not go to work. Even peaceful meetings of the workers which have been declared as such by the Labour Commissioner and held far away from factory premises have been dispersed by charge of mounted police. It is a sad comment on the relations between State and Labour in India that Section 144 Cr.P.C. has been applied against the employers only once in the long history of industrial disputes in this country. The departure from strict impartiality of the executive is often the result of a failure of either party to agree to their proposals for compromise or settlement. And, indeed, once the purely administrative duties are over-stepped for the sake of industrial peace which is not forthcoming, there is brought into the situation such warmth of feeling as would explain many vagaries that create exasperation among the workers in a common resentment against both the employers and the State. It is for this reason in particular that not only is a new machinery of conciliation called for but this machinery should also be utilized as far as possible in the interest of law and order during a strike, without affecting the primary responsibility of the magistracy. During a strike situation the District Officer or the Superintendent of Police should be in constant touch with the Labour Commissioner for an intimate knowledge of the situation as it develops from day to day. With the development of the Labour Office under a whole-time Labour Commissioner in each Province the

Government should be guided in matters of strikes and lock-outs, and the situation in relation to law and order in the industrial centres both by the Labour Commissioner as well as by the district Magistrate or Superintendent of Police. In fact, it is the Labour Commissioner who would be better able to show the way towards peace and order in both industry and in the town or city.

Machinery for Discussion and Settlement of Industrial Disputes

As the strike or lock-out continues until both sides approach exhaustion or develop a less recalcitrant mood, settlement becomes easier than at the beginning of the conflict. Thus there must be some machinery to enable the parties by mutual agreement to subject the dispute to discussion and final settlement. Such machinery should be three-fold:

(i) *Periodical Joint Meetings* of the representatives of the management and the Union for the purpose of mediation. We have in mind here the kind of mediation recommended by the Bombay Strike Enquiry Committee 1928-9: 'Whenever a settlement of any trade dispute shall not have been come to and the operatives are on a strike or have been locked out, meetings shall be held periodically between the representatives of the Millowners' Association (Employers) and representatives of the trade unions concerned in the dispute. The first of such meetings shall be called within four weeks after the commencement of the strike and lock-out and subsequent meetings at monthly or shorter intervals thereafter. The exact date, time and place of such meetings shall be decided at the last joint meeting previous to the commencement of the strike or lock-out.'

(ii) *The Tribunal of Arbitration* will be a body of one or more persons selected by the Government from a panel of five and will be set up only on the consent of the parties to an industrial dispute. No arbitration procedure can command the confidence of employers and workers in India unless the final award is made by some one in the position of a High Court Judge known for his impartiality and freedom from political bias. While all the five need not be persons of high

judicial standing, they should be unconnected with the parties to the dispute and should be able to inspire implicit confidence of both sides by reason of their character and personality. We may refer in this connexion to an observation in an I.L.O. monograph on Conciliation: 'Besides satisfying the requirements of law or custom as to his personal character the conciliator must offer more material qualifications, i.e., knowledge and experience of economic, social and legal matters. The conciliation and arbitration laws of a number of countries contain special provisions on this point.' In some countries it is considered a good guarantee not to appoint a conciliator until the trade union organizations have been consulted or have given their consent. Before the parties agree to have recourse to such arbitration they would naturally take into account not merely the personnel of the tribunal but also the force of public opinion and the duration within which the award could be given.

(iii) *The Industrial Court* consisting of three members will be at the apex of the whole organization. It will deal with appeals relating to settlement of Standing Orders and interpret these in case of disagreement. It will hear appeals in alleged cases of intimidation, discrimination, and victimization of workers, i.e., for alleged unfair labour practices which shall be prohibited by law. It will have public sittings and its awards will be binding on the parties. Punishment will be provided by law for instigating or participating in a strike or lock-out during the session of the Industrial Court. But such punishment should be of a civil nature. During a strike declared illegal, the employer would be free to recruit labour for replacing the strikers and eject them from the quarters provided for them by him in the normal legal procedure; but so long as the strikers are in occupation of such quarters the essential services should not be discontinued or disturbed in any manner.

Defects of the Trade Disputes Act

Such suggestions represent an advance over the Trade Disputes Act of the Government of India, 1929, and do not quite fall in line with the Bombay Trade Disputes Concilia-

tion Act, 1934. Both employers and labour leaders are now familiar with the drawbacks of the Indian Trade Disputes Act. It is only suitable for very big disputes. The experience of the Government of Bihar will be found valuable in this connexion. 'A Board can only be appointed by Government and it is usually not practicable to do so until a dispute has been in progress for some time. Since a Conciliation Board has no power to implement its own findings, it is hardly possible to appoint a Board until both parties show some disposition to negotiate and this stage is frequently not reached until both sides are approaching exhaustion.' By this time great suffering of the workers and loss of wealth has already taken place. 'It is important, therefore, that there should be some means for conciliation which is suitable for small as well as large disputes and which can be applied at an early stage, before matters have gone to the length of a strike.'

It must be mentioned that for the period of seven years, 1929-1936 the machinery provided by the Trade Disputes Act was brought into use on only five occasions in the whole country. Over a decade during which the Act has been in force no advantage was taken of its provisions for the settlement of industrial disputes in Bihar until 1938 when three important disputes were referred to Boards of Conciliation appointed under this Act, and in each case a settlement could be achieved which was acceptable to both the employers and the workers concerned. There is a good deal to be said in favour of the view widely held in the country—that the Act has not been given a fair trial and that before any new machinery is attempted such trial should be given. On the other hand, the provision of means of mediation and conciliation at the beginning of an industrial dispute is indispensable.

Our suggestions have this advantage—that they provide for a machinery of compulsory conciliation, except where the Government decides otherwise, and also for the process of mediation during the progress of an industrial dispute. There are three partners in industrial production—the worker, the employer and the public. It is necessary to provide a machinery through which the public can as early as possible in the course of a dispute express its judgment on the issue of the

conflict in the entire social and economic context. It must be conceded, however, that an undue postponement of a strike, which has ultimately to be declared, would act against the workers. Thus the period is rigidly limited from a maximum of 4 months, as in the recent Bombay Trade Disputes Conciliation Act, to only five weeks from the date of notice of the dispute. The provision in the Bombay Act making strikes and lock-outs illegal, if these are declared before the necessary processes of conciliation are gone through, is salutary. Although the rights to strike and bargain collectively are basic economic rights of free workers, the hardships of an industrial struggle that fall more heavily on the workers than on any other class are frequently preventible. Indeed, such is the necessity of eliminating these hardships in an industrial community that there is a universal desire to disown the authorship of a strike, and to put the blame for starting it always on the other party. Recent experience of strikes in India, indeed, affords clear proof that quite a large number of them could have been easily avoided, and the points at issue satisfactorily settled otherwise. The provision that a strike or lock-out shall be illegal without a week's notice will encourage sanity and a spirit of compromise. The illiteracy and ignorance of the vast majority of the industrial workers, coupled with the lack of organized trade unionism and of responsible leadership may, however, make it impossible for them to conform to the letter of the law in respect of illegal 'lightning' strikes. Again, any penalty imposed as a consequence of participation in such an illegal strike will be extremely difficult of enforcement where large masses of workers are involved. Thus legislation embodying the scheme of conciliation and arbitration should not be made applicable immediately to all industrial areas in India. Further, the provisions of the measure which would lay down punishment for an illegal strike or lock-out should be liberally conceived. In India, the enforcement of the award of the tribunal of arbitration against a large mass of ignorant workers and the union executive is full of risks. We, therefore, do not favour compulsory arbitration in the present industrial circumstances in this country. In awarding punishment for participating in

an illegal strike wide discretion should indeed be left to the magistracy for the stress of the educative rather than the punitive effects of the law and the offence should in no case be considered criminal either of the workers or the employers. The same difficulty of enforcement would apply to the award of arbitration which is binding. Compulsory arbitration is virtually a denial of the workers' right to strike from which flows their right to collective bargaining and is nowhere in existence except in Australia and in the totalitarian countries. Voluntary arbitration is different in character. It is in effect a self-denial of the workers' freedom in respect of a particular industrial policy demanded in the interests of the public or of the industry. In so far as it is self-imposed it gives the worker and the employer an opportunity to assimilate an economic right with their obligation to the community, and thereby adds to the moral stature of both. Every opportunity should be given both by the employer and the State to enable the worker to adjust himself even to an adverse and irksome award in order that the best interests of the community can be served.

During the last War the Government of India decided by amendment of the Defence of India Rules to deal with strikes by compulsory arbitration as a war-time precautionary measure. Any strike or lock-out was made illegal unless a fortnight's notice was given. The period of notice gave time to Government to set up machinery for conciliation or to appoint an adjudicator. The Amendment to the Defence of India Rules made the award of the adjudicator enforceable by Government. But it was not obligatory for the Government to enquire into the grievances of the workers before an actual or threatened strike, nor to provide for adjudication for these. While the conditions of work in a factory could be made more irksome and strenuous by the employers without the approval of the Government, no worker could leave his job for another which was more attractive during war-time without the permission of a tribunal which could not increase his wage beyond 10 per cent. Nor did the Government in every case use the power of compulsory arbitration where a trade union raised a dispute and notified its intention to go on strike.

Strikes were declared without notice during the war in several industrial centres with impunity. The Government chose neither to punish the labour leaders, nor to prescribe fair wages and fair conditions of employment for which they had obtained powers according to the Defence of India Rules. On the other hand, the employers complained that the decisions of arbitration tribunals for the settlement of trade disputes under these Rules were marked by a regrettable lack of uniformity of view-point, which uniformity, they suggested, could only be attained by an arbitrator commanding the respect and confidence of both parties and holding a full-time appointment.¹

Briefly put, we envisage the following agencies for securing industrial peace and amicable relations between labour and management:

(a) Works Committees in different shops or departments of big industrial establishments working in concord with the labour union. Representatives of workers and of the management will deal in these Committees with complaints and grievances arising in the course of day-to-day work within a single industrial undertaking, and remove them at the stage when it should be easiest to do so.

(b) The Labour Commissioner and the Labour Officers will endeavour to settle disputes, especially of non-unionized workers, by amicable arrangement between the parties, their findings and decisions gradually evolving into a labour relations code. Standing Orders agreed to both by labour unions and the employers' associations will be prepared under their supervision. These, it is expected, will reduce considerably the number of labour complaints. Cases of violation of the Standing Orders will be referred to the Labour Commissioner or the Labour Officers. No change in the Standing Orders will be admissible without previous agreement between the labour union and the employers' association. Any violation of these by either party will be punishable.

(c) Labour Unions, which will be safe-guarded in their right of collective bargaining and against intimidation, dis-

1. H. R. Haddow's Address before the annual general meeting of the Bengal Chamber of Commerce, Feb. 26, 1942.

crimination and victimization by law, will deal directly with the management in respect of day-to-day grievances of workers. Neither the Works Committees nor the Labour Commissioner nor the Labour Officers should encroach upon what is the legitimate and principal sphere of work of the trade unions. In Great Britain Conciliation Officers who are appointed for every important industrial centre by the Ministry of Labour, work in close co-operation with the trade union movement.

(d) The Wage Board at each important industrial centre will see to the implementing of the minimum wage legislation and schemes for the standardization of jobs and wages, and examine, approve or revise rates for both time and piece-work occupations according to the state of machinery or working conditions in each industrial establishment and the movement of the cost of living index numbers. Its clarification of matters in respect of wage rates, rationalization and intensification will promote harmonious relations between workers and employers.

(e) The Board of Conciliation will be compulsory if the Government considers the industrial dispute significant enough. No strike or lock-out will be legal unless it is preceded by a week's notice, and by an enquiry into the dispute by the Board of Conciliation which should be appointed immediately as the strike or lock-out notice is tendered and report within a week's time.

(f) Periodical conferences of the parties during the continuance of a strike or lock-out for the purpose of mediation

(g) The Tribunal of Arbitration, which will be set up only when the parties to a dispute consent to arbitration
Compulsory arbitration is not adopted.

(h) The Industrial Court, which will hear appeals relating to Standing Orders and the orders and decisions of the Labour Commissioner or the Labour Officers, interpret them if there be dispute, and decide all alleged cases of intimidation, discrimination and victimization or those which arise out of any 'unfair labour practices' prohibited by law. It should be a whole-time Court consisting of a judge or judges with special qualifications. In all matters in respect of labour relations

that come before it, its decisions and orders shall be final and binding on the parties.

Certain legal safe-guards defining the legitimate activities of the trade union and the management during a strike or lock-out will also be necessary in order that the industrial dispute does not leave behind a legacy of bitterness preventing the resumption of cordial relations between the parties. Among these are the definition of peaceful picketing during a strike as, for instance, adopted in the British Trade Disputes Act 1926-7, the legal prohibition of the recruitment of labour by the employers during a strike and the reinstatement of workers after an unsuccessful strike.

INDEX

- Aborigines**
 - and serfdom, 5-6
 - in factories, 5-6, 11-12
 - in mines, 5-6, 11, 92
 - in plantations, 5-6
 - women in mines, 93
- Absenteeism**
 - causes of, 53-4
 - in coal fields, 52
 - in cotton mills, 40-1, 42-3
 - in Jute mills, 41-2
 - in mines, 25-9, 92
 - in plantations, 20
- Adarkar, B. P.** 319
- Advances**
 - for debts, 72
 - in mines, 29
 - in quarries, 31-2
 - recruiting, 19, 20, 71-2
- Age of employment**
 - in quarries, 32
 - in factories, regulated, 93-4
 - in factories, unregulated, 94-5, 97-9
 - in mines, 92-3
 - in plantations, 99-100
 - in jute factories, 94
- Agriculture**
 - balance between industry and, 1-2
 - landless labourers, 1, 7, 11, 19
 - migration from, 2-6
 - effects of over-crowding in, 3-4
 - wages in, 3, 5-6, 19
 - its influence upon industrial wages, 3ff., 7
 - miner's connexion with, 7, 23, 25-6
 - factory worker's connexion with, 8-10, 15, 16
 - plantation worker's connexion with, 19
 - seasonal industries and, 32-3
- Ahmedabad Millowner's Association**, 35, 339
- Ahmedabad Textile Labour Association**, 34, 339-40
- All India Trade Union Congress**, 342
- Argora Emigration Depot**, 19
- Assam**
 - Valley; absenteeism in, 20
 - access to, 21
 - plantations, 17-23
 - recruiting of labour for, 17-22
 - Emigration Act, 18
 - Labour and Emigration Act, 31-2
- 'Badli' Labour**
 - decasualization of, in Bombay and C.P., 36-7, 39
- Banerjee, Sasipada**, 325-6
- Benedict**, 300
- Bengalee, S.S.**, 325
- Beveridge Plan**, 323-4
- Bidi factories**
 - women in, 96ff.
 - children in, 96ff.
 - cottage production and, 96ff.
 - hours of work in, 97
 - unhealthy conditions of work in, 97
 - wages and earnings in, 97-8
 - age of children in, 97
- Bidi-making industry**, 308
- Bihar Labour Enquiry Committee**, 68, 281-2, 293, 297, 304, 305, 315, 330, 355, 360, 361, 362
- Blunt, Edward**, 3
- Bombay Industrial Disputes Act**, 65, 333
- Bombay Millhand's Association**, 325
- Bombay Strike Enquiry Committee**, 338-9
- Bombay Textile Labour Enquiry Committee**, 317, 332, 333

- Brahmo Samaj, 325-6
- Bribery
 - among plantation workers, 20-1
 - ,, factory workers, 34-5, 36
- British Select Committee on National Expenditure, 298
- British Trades Disputes Act, 1926-7, 355, 370
- Butler, Harold, 4, 312
- Byrnes Law, U.S.A., 356
- C. P. Regulation of Factories Act, 98-9
- Cawnpore Employer's Association, 347, 349, 352
- Cawnpore Labour Enquiry Committee, 35
- Cawnpore Mazdur Sabha, 345, 352
- Census Report 1911, 3
- Chaturvedi, S.C., 274-5
- Cherries of South Indian towns, 278-280
- Children
 - age of employment (See Age of employment)
 - in factories, regulated, 93-4
 - ,, unregulated, 94-100
 - hours of work for, 94
 - in plantations, 18, 20, 99-100, 101-2
 - in mines, 92-3
 - in quarries, 31
 - wages of (in plantations) 101-110
 - welfare of, 18-19, 99-100
 - certification of, 93
- Children and Young Persons Act, 306
- Cities
 - disparity of sex ratio in, 8
- Coal Mines
 - children in, 92-3
 - contractors in, 23ff.
 - hours of work in, 27
 - housing of workers in, 92
 - production in, 23
 - recruitment of labour in, 16, 23-31
 - wages and earnings in, 90-2, 117-130
 - women in, 23, 30, 88, 89, 91, 92
- agriculturists-cum-miners, 6-8, 23ff.
- absenteeism in, 25-30, 92
- surplus labour in, 25ff.
- permanence of labour force in, 7-8, 23, 25-6, 28
- shortage of labour in, 23, 29ff.
- sardar in, 23-5, 28, 29
- Sarkari management of, 25
- drunkenness in, 27
- cost of recruitment, 29
- need and plan of labour exchange in, 29-30
- causes of decline of earnings in: their effects and remedies suggested, 91-2
- Conciliation
 - Machinery of industrial:
 - (A) The Works Committee, 350-2
 - (B) The Trade Union, 352-3
 - Notice of Strike and, 353-4
- Continuity of Service, 50-1
- need of regulation of, 81-2
- lines of regulation of wages and conditions of employment, 83-6
- Contract Labour, 46, 70-86
 - general vogue of, 70-1
 - in quarries and mines, 71-3
- Contractors
 - in engineering and metal works, 46
 - in sugar industry, 80-1
- Cotton Ginning and Pressing Factories Act, 1925, 302
- Creches, 99
 - in Indian Factories, 307
- Curjel, D.F., 292-3
- Depressed Castes
 - in mines, factories and plantations, 5-6, 8-9
 - permanence of labour force and, 11
- Desai, K. K. 333
- Dhowrahs of the coal-fields, 280-3
- Dooars (in Bengal), 19
- Emigration
 - of Indian labour, 1

- under indenture, 1
- inter-provincial, 3-4, 11, 18, 25
- of plantation labour to Malaya and Ceylon, 18
- Employment,**
 - irregularity of, in coal-fields, 52-4
- Employment of Children Act, 1939, 99.**
- Factories**
 - recruitment of labour in seasonal, 32-3
 - children in, 93-5
 - women in, 94-5
 - control of, 98-9
 - number of, 98
- Factories Act, 71**
- Farming**
 - small, support of, by industry in India, 9
- Fines**
 - in textile establishments, 64
 - in railways, 65
 - in engineering establishments, 64-5
- G.I.P. Railwaymen's Union, 343**
- Great Depression, 321**
- Gupta, S.C., 350**
- Haddow, H. R. 368**
- Health Insurance Scheme, 319**
- Holidays**
 - in seasonal and organized industries, 48-50
 - in mines, 55-6
 - in engineering industry, 56-8
 - in Soviet Russia, 59
- Hours of Work, 296-8**
 - fatigue and, 299-300
 - in other countries, 298-300
 - war and, 298-300
- Housing**
 - permanence of labour force and, 11, 23
 - shortage of, 11, 12
 - industrialists and, schemes, 12, 15
 - government and, 12
 - effects of bad, 12-13
 - in mining areas, 23, 25, 92
- bustees, 275-8, 285-6
- mining settlements and, 270, 280-4
- employers and, 270, 272-4, 277, 282, 290-1
- plantations and, 270, 285-6
- Bombay and, 270-3
- sanitation and, 271, 274-5, 282-3
- Ahmedabad and, 271-3
- Ahmedabad Labour Unions' enquiry into, 271
- Sholapur and, 272-3
- Cawnpore and, 273-5
- Hooghly riverain region and, 275-8
- Quarry workers and, 283-4
- bustees and barracks of plantations, 285-6
- improvement of, 286-8
- Municipal, 288-290
- Co-operative societies, 289-290
- Employer's, 290-1
- and mortality, 291-3
- and vice, 293-5
- Housing and Town Planning Act, 1909, Great Britain, 289**
- Indian Colliery Owner's Association 27**
- Indian Factories Act, 94ff., 297ff., 346**
 - its extension to small-scale industries, 307-8, 325
- Indian Factories (Amendment) Act, 94**
- Indian Jute Mills Association, 9**
- Indian Mines Act, 93, 306**
 - its revision, 308-9
- Indian Mining Federation, Calcutta, 27**
- Indian Trade Unions Act, 333**
- Industrial**
 - backward provinces, 4
 - settlement of disputes, 363-4
- Industrial Health Research Board, Great Britain, 298-300**
- Jamshedpur**
 - turn-over in, 39
 - temporary workers in, 44-5

- Jharia Mines Board of Health, 280-1, 293
- Jobbers, 34-6
 - recruitment by, 32ff.
- Joshi, N.M. 327
- Jute Mills
 - number of workers in, 10
 - remittances home from, 10
 - annual holiday in, 10
 - recruitment in, 37ff.
- Kamiauti Agreements Act, 5-6
- Kanganis, 19
- Labour
 - force; miners-cum-agriculturists, 6-8, 23ff.
 - Giridih coal-fields and permanence of, 8
 - permanence of, in mines, 7ff., 23, 28
 - economic and social factors determining, 7-9
 - factors detrimental to, 8, 11-12
 - in plantations, 19-20
 - contract, breach of, 18, 20, 22
 - recruitment of—
 - in plantations, 17-23
 - in mines, 23ff.
 - in factories, 32 ff.
 - in quarries, 31-2
 - Bureaus, 38
 - Exchanges—
 - objects of, 37
 - need of, 42-3
 - in Japan, 43
 - Labour Commissioner in U.P., 352
 - Leave
 - in seasonal and organized industries, 48-50
 - in mines, 52ff.
 - in engineering industry, 56-8
 - need of rationalization of, 59-61
 - Load
 - regulation of, 305-6
 - prohibitory regulations in the West, 305-6
 - Lokhande, N.M. 325
 - Madhavi, V.A. 279
 - Majumdar, P.C. 326
 - Mason, 300
 - Maternity
 - benefits, 61
 - leave, 60, 99
 - Maternity Benefit Acts, 316, 319
 - Medical Care, Its inadequacy, 312-314
 - Meetings, prohibition and restraint of, 331-2
 - Mica (Industry) Factories, 94ff.
 - women in, 94-6
 - children in, 92ff.
 - Migration
 - between field and colliery, 8, 23-4, 30
 - between field and factory, 9
 - to plantations, 17-20
 - Mill Kamdar Union, 341
 - Millowners' Association, Bombay, 36
 - Mines Act, 31, 74-5, 85
 - Mines Maternity Benefit Act, 61
 - Mortality
 - housing and, 291-3
 - Bombay city infant, 291
 - Bihar Coal-fields and Bengal Jute Mills, 292-3
 - Mysore Labour Act, 335
 - National Industrial Recovery Act, 334
 - National Labour Relations Act, U.S.A., 333, 336ff.
 - National Labour Relations Board, 335ff., 358ff.
 - National Trade Union Federation, 342
 - Nehru, Pandit Jawaharlal, 330
 - New G.I.P. Railway Staff Union, 343
 - Non-Co-operation Movement, 1919-1921, 346
 - Northern India Employers' Association, 35-6
 - Old age,
 - provision for, 319ff.
 - Overcrowding
 - in Bombay, 269, 270-1
 - in Cawnpore, 273-5
 - in Mill towns, 276
 - in cherries, 278-9

- in Bihar coal-fields, 281
- Overtime and payment of wages, 301
- Payment of Wages Act, 51, 64-5, 74, 85, 99
- Picketing, definition of peaceful, 355
- Planning, industrial, 12ff.
- Plantations
 - recruitment of labour in, 17-23, 104
 - number of persons employed in, 18, 100-1, 108
 - recruiting areas, 18-19
 - tea, 18ff., 100-2
 - coffee, 18
 - rubber, 18
 - access to, 21
 - child welfare in, 99-100
 - repatriation from, 19ff., 108
 - earnings of women in, 100-8
 - need of labour exchange and its advantages in, 22-3
 - wages and earnings in, 100ff.
 - difficulty of estimating real wages in, 102, 104
 - need of minimum wage fixation in, 106-110
 - bustees and barracks of, 285-6
- Prasad, Dr. Rajendra, 330
- Promotion, a graded system of, 66-9
- Provident Fund and gratuity systems, 61-3
- Provident Fund and retiring gratuity, 319-20
- Provident Fund Act, 320
- Punishment in industry, nature and procedure, 63-6
- Quarries
 - recruitment in, and its abuses, 31-2
 - working conditions in, 31-2
 - need of regulation of, labour, 73-5
- Raising Contract System, steps for the elimination of, 77-9
- Recruitment of Labour, (see Labour),
 - evils of, 37ff.
- Rest pauses
 - in U.S.A. and Japan, 288-9
- Need of Organized, 300-1
- Rice Milling Industry,
 - women in, 98
- Royal Commission on Labour, 13, 33, 75-6, 77, 91, 302, 314
- Sardars, their role as intermediaries, 79-80
- Sex Ratio, disparity in, 92, 293-5
- Shellac Factories, 94-8
 - mechanized, 96
- Shelter
 - regulation of load and, 305-7
- Shinde, V.R. 326
- Sickness
 - benefit schemes, 56-8, 314-16
 - Fund at Nagpur, 315-16
 - insurance, compulsory, 316-19
- Slaves,—bond, 5
- Slichter, 67
- Slums, 12-13, 270-5
- Smith, May, 300
- Social Security
 - the responsibility of the employers and the State towards, 322-5
 - Committee in the U.S.A., 322-3
 - the priorities in the structure of, in India, 324-5
- Standard of Living, disparity between rural and urban, 4-6
- Street Sleepers, 271, 275
- Strikes
 - attitude of police and magistracy towards, 327-8, 361-3
 - general causes of, 344-5
 - important, and their consequences, 345-50
 - Assam Tea Garden, 346
 - Notice of, and Conciliation, 353-4
 - the conduct of a, 354
 - safe-guards during, 360-1
- Tea Districts Emigrant Labour Act, 1932, 18, 22
- Temperature,
 - in factories, 296, 302-4
- Tenement, census of Indian Industrial Cities, 273

- Textile Labour Association, Ahmedabad, 333-40, 350
- Textile Labour Enquiry Committee Report, 357
- Trade Boards in Great Britain, 353
- Trade Disputes Act, 333, 347
 - its defects, 364-370
- Trade Unions
 - attitude of police and magistracy towards, 327-8
 - obstacles to the growth of, 328-30
 - victimization and establishment of rival, 330-1
 - compulsory recognition of, 337-8
 - need for a, Act in India, 337-8
 - employers' objection to 'outsiders' in, 338-9
 - instance of strong and effective, 339-40
 - need of social welfare programmes by, 340-2
 - National Federation of, in India, 342-3
- Trade Unionism, 325
 - obstacles to the growth of, 328-330
- Trade Unions Act, Indian, 328
- Transport, facilities for daily workers, 14-16
- Unemployment
 - Convention, 44
 - Insurance, 321-2
 - Relief Funds, 321
- Unions, difficulties of the early labour, 326-8
- Ventilation, and lighting
 - need of improvement of, 301-2
 - in Ahmedabad factories, 302-3
- Victimization: and establishment of rival unions, 330-1
 - prevalence of, of unions, 332-3
 - necessary measures to prevent, American and Indian models, 333-5
- Villages,
 - Industrial workers' link with the, 11ff.
 - workers' contact with, 53
- Wadia, B.P. 326-7
- Wages
 - in seasonal industries, 6-7
 - of miner and his wife, 89-91
 - of women in Jharia, 90
- Wages Boards, 69
 - the necessity of, in India, 353
- War, Small scale industry in India and the, 16
- Welfare Work
 - Adult education, night schools and technical classes, 309-312
 - early social, among labourers, 325-6
- Woman and Child labour
 - Employment of, in the plantations, 86-7
 - in factorics and mines, 87-8
 - exclusion of, from underground work, and its economic consequences, 88-9
- Women,
 - underground work and, 23, 88-92
 - hours of work in factories, 94ff.
 - their wages in plantations, 100-108
- Workers' Rights 355-360
- Working Conditions
 - improvements of, 304-5
 - protective, 304
- Working Men's Mission, 325
- Workmen's Compensation Act, 82, 85, 316, 319

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